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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**PLAY WELL WITH OTHERS:
IMPROVISATIONAL THEATER AND COLLABORATION
IN THE HOMELAND SECURITY ENVIRONMENT**

by

Andrew J. Phelps

September 2013

Thesis Advisor:
Second Reader:

Kathleen Kiernan
Christopher Bellavita

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**PLAY WELL WITH OTHERS:
IMPROVISATIONAL THEATER AND COLLABORATION
IN THE HOMELAND SECURITY ENVIRONMENT**

Andrew J. Phelps
Emergency Manager, City of Santa Fe, Santa Fe, New Mexico
B.A., John Jay College, 2008

Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL
September 2013**

Author: Andrew J. Phelps

Approved by: Dr. Kathleen Kiernan
Thesis Advisor

Dr. Christopher Bellavita
Second Reader

Mohammed Hafez, PhD
Chair, Department of National Security Affairs

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ABSTRACT

Collaboration, though identified as a critical component to the Homeland Security (HLS) enterprise, can be difficult to achieve when working in complex HLS environments or addressing the wicked problems that permeate the enterprise. Federal doctrine and directives tell us collaboration is important, but we are not told how to collaborate. Improvisational theater, on the other hand, is built on collaboration among performers to invent a narrative, performers who have been *trained* to collaborate.

Based on a distillation of improvisational theater into five key principles, a comparative analysis of established collaborative models, and a case study of collaboration in the homeland security environment, I believe that those working within the homeland security enterprise can apply the same principles used by theatrical improvisers. This thesis proposes a new framework for collaboration, the Improvisational Theater Collaboration Model. Utilizing this framework to develop collaboration training or as a tool to assess the efficacy of collaboration in homeland security environments are two suggestions for further study into the Improvisational Theater Collaboration Model.

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LIST OF ACRONYMS AND ABBREVIATIONS

BP	British Petroleum
DHS	Department of Homeland Security
FOSC	Federal On-Scene Coordinator
GAO	Government Accountability Office
IAP	Incident Action Plan
IASG	Interagency Solutions Group
ICP	Incident Command Post
JIC	Joint Information Center
MMS	Minerals Management Service
MSST	Marine Safety Security Teams
NCP	National Contingency Plan
NGO	Non-Governmental Organization
NIC	National Incident Command
NIMS	National Incident Management System
NPFC	National Pollution Funds Center
NRT	National Response Team
PFO	Principle Federal Officer
PPD-8	Presidential Policy Directive 8
QHSR	Quadrennial Homeland Security Review
RP	Responsible Party
SEOC	State Emergency Operations Center
SERT	Florida State Emergency Response Team
SONS	Spill of National Significance
SOP	Standard Operating Procedure
USCG	United States Coast Guard

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EXECUTIVE SUMMARY

Collaboration, though identified as a critical component to the Homeland Security (HLS) enterprise, can be difficult to achieve when working in complex HLS environments or addressing the wicked problems that permeate the enterprise. Federal doctrine and directives tell us collaboration and coordination is important, after-action reports often cite a lack of collaboration or coordination as an area in need of improvement in our disaster response operations, and operational coordination has been identified by the Federal Emergency Management Agency as a core capability for a jurisdiction's efforts to provide homeland security. However, we are not told how to collaborate.

Improvisational theater is built on collaboration among performers to invent a cohesive narrative by performers who have been *trained* to collaborate. The principles that guide improvisational theater performers have been taught to children through the use of simple theater games and continue to be used to train performers in some of the most successful professional improvisational theater groups in the country.

This thesis has distilled the fundamentals of improvisational theater into five key principles in an effort to document how theatrical improvisers collaborate and create a model for collaboration based upon these principles. A comparative analysis of established collaborative models and a model based upon the principles of improvisational theater was conducted, and a case study of collaboration in the homeland security environment was studied through the lenses of a previously published model of collaboration and the improvisational theater model for collaboration. Following this analysis and case study, I believe that those working within the homeland security enterprise can apply the same principles used by theatrical improvisers.

This thesis proposes a new framework for collaboration, the Improvisational Theater Collaboration Model. This model serves at least two possible purposes for the homeland security enterprise. This framework could be used to develop a collaboration training curriculum to introduce those within the homeland security enterprise to the principles used by improvisational theater performers in an effort to facilitate

collaboration. This framework could also have utility as a tool to assess the efficacy of collaboration in homeland security environments and determine if, when, and how collaboration occurred during the response to an incident, the planning process for a large event, or in establishing homeland security partnerships. Each of these suggestions is recommended for further study into the Improvisational Theater Collaboration Model.

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I need to begin by thanking the institution that provided me with a forum for exploring what still seems to me a strange idea for strengthening the homeland security enterprise. The faculty and staff of the Naval Postgraduate School's Center for Homeland Defense and Security (CHDS) are unequalled, and I do not know that a better group of homeland security practitioners has ever been assembled than the professionals of Cohorts 1005 and 1006. The tremendous support I received from classmates after I first threw this improvisation-for-homeland security idea against the wall was inspiring, and the lasting friendships continue to inspire. Ellen Gordon, Dr. Lauren Wollman and Dr. Chris Bellavita have my deepest gratitude for helping push this paper along, and Dr. Kathleen Kiernan for shepherding this project to its current stage of completion.

This paper literally would not have been possible without the creative and talented actors I have worked with, from my introduction to theatrical improvisation at Churchill High School in Livonia, Michigan through my studies at the New Actors Workshop in New York City; the opportunities to perform with some of the best improvisers I have ever known in The Khickercast Project, and the treasured mentorship I received from Paul Sills. I would be remiss if I neglected to thank Curt Bohlen and Agostino Rocchi who became my adoptive family for my first few years of adulthood and kept me employed as I transitioned from struggling actor to struggling emergency manager. These two guys bear more responsibility for the good things that have happened to me than they will ever know.

My colleagues and leaders at the New Mexico Department of Homeland Security and Emergency Management were instrumental in my success at CHDS, and the support I received from Tim Manning, John Wheeler and Susan Walker as I worked through the application process and while in school convinced me that I belong in this profession. The New Mexico Local Preparedness Program staff carried much of my workload while I was in school but made coming back to work after two weeks in Monterey something to look forward to. Thank you, Donald Mathiasen, Lorenzo Espinoza, Courtney McBride and Marcella Benton for keeping the program moving forward and being the first to

practically apply ideas from this paper. Local New Mexico Emergency Managers Phil Taylor and Jeff Phillips were, and are, two members of a state-wide emergency management community that have had a profound influence on me and of which I am proud to be included. The members and leadership of the City of Beacon Fire Department, New York Search and Rescue, Battery Park Community Emergency Response Team and La Cienega Fire Department also deserve my thanks for the “boots on the ground” experience that make me a better public servant.

My family, my parents, brothers and sister all work so hard to understand what it is I do, and their support for this career of mine really keeps me going. Your unwavering belief in what I do means the world to me. My eternal gratitude. Only two people, however, have had to endure stacks of books, late-night studying and writing marathons, conference calls, and serve as sounding-boards for the ideas that went into this paper and subsequent framework for well over 18 months: my best friend and wife, Nicole, and darling daughter, Guinnevere. I could not have done any of this without your love, understanding, confidence, and support. This, and most everything I do, is for the two of you. Thank you.

I. INTRODUCTION

I think the fear of failure is why I try things... if I see that there's some value in something and I'm not sure whether I deserve to attempt it, I want to find out.

—Keith Jarrett, jazz pianist

This is a narrative about homeland security. This is a narrative that offers a different approach to a wicked problem in a discipline rife with wicked problems.¹ This is a narrative that may be about changing a culture but is more about nudging along the evolution of a culture. Frank Barrett said in his paper *Creativity and Improvisation in Jazz and Organizations*, “Improvisation involves exploring, continual experimenting, tinkering with possibilities without knowing where one’s queries will lead or how action will unfold.” That statement pretty well sums up my process for the conceiving and telling of this homeland security and improvisation narrative. This is a narrative about me, written through my observations from within the homeland security enterprise, and serving my need to creatively engage current and future practitioners, leaders and academics operating in the homeland security enterprise. This engagement, and perhaps the resulting innovation, may serve to increase the enterprise’s capacity to more adequately address the wicked problems that permeate this enterprise through enhanced collaboration and a desire to play well with others.

A. PROBLEM STATEMENT AND HYPOTHESIS

Once upon a time, I was an actor living my childhood dream of performing live theater in New York City. Then one day, a phone call brought me to the roof of my East Village apartment in lower Manhattan to watch smoke billow and flames lap from a hole in the center of the upper floors of one of the World Trade Center towers, allegedly

¹ In his book, “Dialogue Mapping: Building Shared Understanding of Wicked Problems,” J. Conklin, Ph.D. describes wicked problems as having the following characteristics identified by Horst Rittel: 1: You don’t understand the problem until you have a solution. 2: Wicked problems have no stopping rule. 3: Solutions to wicked problems are not right or wrong. 4: Every wicked problem is essentially unique and novel. 4: Every solution to a wicked problem is a “one-shot operations.” 6: Wicked problems have no given alternative solutions (Conklin, 2006).

caused by the impact of a small airplane. Minutes later I saw what looked at first like another helicopter floating behind the other World Trade Center tower. Then the shape seemingly morphed into an airplane. As the airplane drew closer to the tower, and its wings began to tilt, I leaned my body to the left, hoping the aircraft would follow the movement of my body and avoid hitting the tower, as a baseball player tries to keep a line drive inside the foul pole. The airplane disappeared behind the second tower and emerged in a ball of flame and debris from the other side.

I did not experience an epiphany at that moment about the direction for my life, but as the hours passed, I began to grieve not only for the victims of those attacks, but for myself as well. I began to feel worse about not being able to do anything to help than for what had happened a little more than a mile from my apartment and at the Pentagon and a field in Pennsylvania. That feeling of helplessness began to bother me. I started researching opportunities to volunteer in my community to learn about this emergency management business I had been hearing about. This research led me to connect with a Community Emergency Response Team in Battery Park City across the street from the World Trade Center, an opportunity to join a volunteer search and rescue team and after moving to a city north of Manhattan become a volunteer firefighter while working towards my undergraduate degree in public administration and emergency management.

This career change took me out of a world I had lived in from a very early age, surrounded by singers, dancers, writers, actors and all other types of artistic creativity. I now found myself surrounded by firefighters, police officers, emergency medical technicians, and bureaucrats; people in uniforms or neckties. I kept hoping my creative background would be of benefit in this new career I had chosen, but was told more than once that creativity or independent thought was not to be considered an asset in a profession where wandering beyond carefully written Standard Operating Procedures (SOPs) could cost lives. My observations and experience, however, have shown this not to be the case, and that creativity can thrive in homeland security. While SOPs, legislation, and scope of practice guides much of what homeland security practitioners do on a daily basis, innovation and creativity touches almost every corner of this enterprise. The design of new safety devices for firefighters and law enforcement officers, the use of

Radio Frequency Identification chips to track hazardous material shipments, and advances in automatic license plate readers are all innovations to homeland security and examples of creativity within the homeland security enterprise. Innovations can also be disruptive before they become the norm. At one time, insurance companies privately funded all fire departments, but the shift to public, government-funded fire departments, which at the time it was introduced was a disruptive innovation, is now the preferred fire service model. X-ray machines at security checkpoints were disruptive innovation when introduced but have become a completely normal and an expected part of commercial aviation. This narrative hinges upon the belief, supported by observation and experience, that homeland security is open to innovation and creativity.

I have also observed that a cornerstone of homeland security, and the necessity for agencies and organizations with a public safety mission to collaborate to solve problems, has largely been untouched by innovation. That is not to say there have not been innovations or flashes of genius that have impacted collaborative capacity. Certainly innovations in technology have allowed information to be shared more quickly, communication to occur more clearly and across wider geographical areas, but those innovations do not address the basic function of the collaborative process during emergency and disaster responses, and that is to make decisions in concert with the other coordinating agencies and organizations. I am concerned with the way agencies and organizations, at times, collaborate, or rather, do not collaborate. A recent report by the Government Accountability Office (GAO) found that while federal departments like the Department of Justice and Department of Homeland Security have processes to measure information sharing and collecting, field-based entities are not held accountable for inter-agency coordination, nor is there a mechanism in place to measure coordination or collaboration. (GAO, 2013, p. 33) I propose agencies and organizations within the homeland security enterprise can be better collaborative partners. I have a fair amount of experience working in emergent collaborative environments in the form of improvisational theater and believe this experience can be applied to this problem. Reaching back into my past may help me explain how I arrived to a novel approach to this wicked problem.

As an actor, I was most influenced by my work with Paul Sills, founder of The Second City and considered by many to be the originator of improvisational theater performance. Over the span of several years, I was a student in his improvisation classes, was directed by him in a scripted performance developed through improvisation and was his assistant director for one of his Story Theater productions in New York City. The years working with Sills served as the basis for the development of my understanding of the principles of improvisation found in this narrative. Homeland security, like most things, has evolved through innovation and creativity, as illustrated through the examples provided earlier in this chapter. That innovation, however, has not yet extended into multi-agency collaboration. The principles of improvisational theater may improve the ability of agencies and organizations that make up the homeland security enterprise to work in a collaborative space.

Improvisation requires a performer to listen to what is being said by his or her fellow players and observe what they are doing, as props are often created through pantomime. The improvisational performer must remain flexible because preconceived narratives are derailed as soon as another player does or says something that is not part of the imagined “script.” Improvisational actors do not have set rules they follow but are guided in their performance through the use of five widely accepted principles of theatrical improvisation that have emerged through the work of Sills, Viola Spolin, Keith Johnstone, Del Close, and others. These principles, which are defined primarily through my experiences studying, performing, observing and directing improvisational theater are outlined below.

1. Principle 1: Progress the Action

In improvisational theater, the goal is to keep the audience entertained. If the narrative stops, or ceases to move forward, the audience will lose interest. It is important that the players focus on agreement and on progress and do not get mired down in perceived mistakes or disagreements. This principle also focuses the performer’s dialogue and action on the narrative and not on being humorous or clever or attempting to wedge a preconceived idea into an emergent story.

2. Principle 2: Yes, and...

Improvise actors are trained to accept offers put forward by their fellow players, often by choosing to say “Yes, and...” instead of “No” or “Yes, but...” The word “No” works as a stop sign in improvised theater, halting any action or momentum built to that point. If one player says “Let’s celebrate your birthday tonight,” a response of “Yes, and... let’s celebrate at the new tango dancing club that just opened” will likely lead to many more possibilities than saying “No.”

3. Principle 3: Allow What is Presented to Change You

In improvisational theater, new information is constantly being introduced, either by fellow players or in some performances via audience suggestions. The players must take that new information and incorporate it into their creative process. This new information can inspire ideas and change the direction of the narrative. It also keeps the players present in the scene and requires them to focus attention on the actions of their fellow players. It forces the players to abandon personal agendas and develop a new path within the narrative in collaboration with their co-players.

4. Principle 4: Make Your Fellow Players Look Brilliant

On the surface, this principle may appear to advocate for glossing over errors or mistakes. In improvisation, there really are no mistakes, so instead this principle encourages setting up fellow players for success, not failure. Often times, improvisational actors do not have set pieces or props to rely on when performing, only other players. It is important for these players to recognize the contributions of their fellow players and not sabotage their performance. Improvisational actors must also provide their fellow players with the tools they need to do their job. If one player approaches another during a scene and asks for an ice cream cone, the other player best serves the scene and their fellow player by scooping some ice cream into a cone and handing it to their partner. If the fellow player says, “But, you are at a pet shop,” then, the one player appears to have made some sort of mistake and the narrative cannot progress.

5. Principle 5: Serve the Good of the Whole

Improvisational theater is generally an ensemble performance. There is no leading performer, and the players utilize the principles mentioned above to support the performance of the whole. This ensemble approach to creating a narrative places each performer on the same plane and allows primary characters to emerge based upon the progression of the narrative, and not on predetermined ideas of who will be the lead performer. This principle guides improvisational theater performers towards elevating the narrative, as opposed to elevating him or her or another performer.

Homeland Security is, in many ways, improvised everyday. While the Transportation Security Administration checkpoint screener at the Albuquerque International Sunport may understand the details and subtleties of his or her role in protecting the flying public and be able to direct a passenger through the screening process by rote, what that screener will encounter through the course of his or her shift is very much unknown. The story of who will come to their checkpoint, their demeanor, the contents of their carry-on bag, or the precise liquid measurements of their tube of toothpaste becomes known only as it happens in real time, exactly how a theatrical improviser has the narrative he or she is working within revealed. Reacting, or making decisions based upon that unfolding narrative is experienced hundreds, if not thousands, of times each day by operators and analysts performing functions within the homeland security enterprise. The yet untapped benefit of the introduction of improvisation into homeland security lies beyond the individual decision-making process and one's ability to think on their feet. The benefit extends to the collaborative nature of homeland security. If each agency, organization, jurisdiction, or private company working within the homeland security enterprise can view itself and its counterparts as performers in an improvised play and accept that each performer must rely on each other, allow themselves to be relied upon, share successes and failures without becoming mired in finger-pointing and focus instead on moving toward the desired outcome, then improvisational theater and its guiding principles will have increased their capacity to collaborate. This will serve to improve the collaborative process that is so important to homeland security.

An improviser being asked to create or contribute to a compelling narrative on the spot puts that performer at risk of failure. It is important, then, that the rest of the performers share that risk with each other and one performer does not stand out from the rest, either in a positive or negative context. Shared risk is also important among agencies and organizations engaged in collaboration to solve a problem, make a decision, or manage an incident.

B. RESEARCH QUESTION

The improviser in me wants to assume that the idea of applying these principles of improvisation to homeland security collaboration makes sense and works. Can these principles help facilitate collaboration? Yes, and... However, the academic in me understands this idea must be supported through research and study. To satisfy my academic voice, I will state that the primary question for which this narrative seeks an answer is this: Can improvisational theater principles be applied to the homeland security collaborative environment?

The development of this narrative also needed to discover answers to several other questions to support the idea that improvisation can, in fact, be applied to homeland security. Are the principles of improvisation fairly consistent among the leading improvisational theater practitioners? What other models have been applied to the collaborative process, and are any of these specific to the homeland security landscape? Is there evidence of the principles of improvisation having been successfully applied to the collaborative space within which the homeland security enterprise so often operates?

The ability to find answers to the questions above required some improvisation itself, starting principally with saying “Yes, and...” to the general idea that there may be improvisation that may be applied to homeland security and continuing with the idea of allowing what was presented to change me. There could have been a tendency to shoe-horn this idea into a space in which it did not fit, but by accepting what was discovered through research, the applicability of improvisation into this homeland security environment revealed itself, and its utility was demonstrated throughout the research process.

C. SIGNIFICANCE OF THIS NARRATIVE

This narrative seeks to stimulate dialogue across the homeland security enterprise about the application of these five improvisational theater principles to our collaborative efforts. Collateral discussion about seeking solutions to our wicked problems in unlikely places may also arise from this narrative. I would like that. This narrative was written for the broad audience of homeland security practitioners, policy-makers, elected officials in oversight positions, and especially those who consider themselves outside of the homeland security enterprise until they find themselves plunged into a homeland security role. All of these potential readers will likely find themselves, at one point or another, relying upon another agency or organization to fully accomplish a task, mission, or goal and will need to have the capacity to effectively collaborate. It is my belief that the pages I have written will make the case that our collaborative capacity can be enhanced by the improvisational theater principles I am putting forward.

The application of these improvisational theater principles to multi-agency coordination is less about making stuff up or thinking on your feet and more about developing the same sense of shared risk improvisational actors have on stage during a performance that agencies and organizations should have as they coordinate during an emergency or disaster. The notion of agencies and organizations sharing risk during an emergency or disaster response may require a shift in homeland security culture, but this narrative will be supported by data, an analysis and comparison of that data through alternate collaborative models, and provide recommendations for making that cultural shift a small step towards an increased capacity for collaboration and not a blind leap of faith into an unknown, unfamiliar landscape.

1. A New Model for Multi-agency Collaboration

The principles of improvisational theater can be adapted into a framework or model to consistently apply those principles to the collaborative space and enhance an agency or organization's collaborative capacity. While other models for collaboration exist (this thesis examines and offers a comparison of the improvisational theater model to the Inter-organizational Collaborative Capacity model developed by Hocevar, Thomas

and Jansen), this paper offers an alternative to those models. Some may say “If it is not broken, do not fix it.” Collaboration is not broken, but it is not quite healthy. The case study used in this paper points to numerous examples verifying that statement. Just as a carpenter has numerous methods to fasten or join two lengths of wood together (screws, clamps, nails, glue, dowels, biscuits, tongue-and-groove joints, and dove tail joints to name a few), so too should the homeland security practitioner have, at his or her disposal, several tools or methods for working in the collaborative space.

In continuing with the woodworking analogy, one method for fastening wood may not be appropriate, or even possible, for every application. A woodworker may feel more comfortable with a specific method, may use another in an attempt to increase efficiency or cost, and may use still another for aesthetics. If we, the practitioners of homeland security, are limited in how we approach collaboration within the enterprise, we are perhaps undermining the collaborative process itself. By adding tools to the proverbial toolbox, our chances of finding the proper tool to fasten two boards, or in the case of homeland security, successfully collaborate with our partner agencies and organizations, are increased. This paper aims to add some additional tools to our collaborative toolbox.

2. Opportunities to Apply the Model

These principles can also be taught, and have, in fact, they have been taught for decades. The use of improvisational theater games began as a training tool and has been successful in other adult training applications². For use in enhancing the multi-agency coordination capability, games that focus on accepting offers, storytelling, listening, and developing situational flexibility are perhaps the most appropriate. Games like “Yes,

² ComedySportz, a national improvisational theater competition organization, offers corporate training through many of their licensees. For instance, the Comedysportz theater company in Richmond, VA offers corporate improvisation workshops, touting on its website, “Basic improv skills translate directly to the business world. Whether it’s creative thinking, public speaking, fostering group dynamics, acceptance of new ideas, or just learning to communicate more effectively – we can help! The best part is, you will be having a fun time together. No lectures. Let us help you to create the team environment you want to work in, by playing improv games while learning the crucial skills of communication, acceptance and teamwork.” Retrieved from <http://www.comedysportzrichmond.com/index.php> on March 2, 2012.

and...,” “Lines on the floor,” and “One word at a time story” have simple rules, opportunities for players to be coached, and are easily adaptable to include homeland security themes.

As part of the training curriculum for the New Mexico Department of Homeland Security and Emergency Management’s Local Preparedness Program, the “Yes, and...” game, in which players must preface their speech with “Yes, and...” any time they wished to address their fellow player. For this exercise, two players were asked to begin developing an Incident Action Plan for a flash flood. One player was assigned the role of a local emergency manager, the other as a state police district representative. During the first stage of the game, there were no parameters placed on what could be said, and the players, after five minutes, had made a decision to set up portable barriers to block roads with water rushing over them. For the second stage of the game, the players were cast in the same roles, given the same task of creating an Incident Action Plan, but the scenario was changed to a severe winter storm and whenever they spoke, they had to begin by saying “Yes, and....” Within perhaps three minutes, the two players had reached the decision to activate the local emergency operations center, contact the state Emergency Operations Center with an initial situation report, request aid for road clearing from neighboring jurisdictions, close the interstate due to deteriorating road conditions and open shelters and warming centers for stranded motorists. Although the titles, agencies, and authorities remained the same for both stages of the game, when each player was required to accept the offer of the other player by saying “Yes” and adding additional action-oriented objectives for the other player to accept by following their “Yes” with “and...,” decisions are made and consensus is reached. Even when the players disagreed about a task, the use of “Yes, and...” allowed them to find common ground without much conflict. For example, the statement “Yes, and let’s call the State Emergency Operations Center and provide a situation report.” was followed with “Yes, and let’s make sure we have enough accurate information to provide the state, so they have a good idea of what we are dealing with,” which was followed by “Yes, and I will have my Operations Chief verify the information we have and run it through the two of us before the call is made.” Had any of those sentences started with “No” or “Instead” or “I think,” the players could

have spent additional time debating the merits of an action rather than coming to an agreement on how to best achieve an objective one of the players thought was important.

Other improvisational theater games that have been used to develop collaborative proficiency in the New Mexico Local Preparedness Program include “Who am I,” and “When I go to California.” These games, detailed in Viola Spolin’s *Theater Games for Rehearsal*, focus on the importance of listening (and remembering) what is being said by the other players, observing nonverbal cues and clues and not dismissing what fellow players are saying or doing (Spolin, 1985).

Just as improvisers are coached throughout a rehearsal process, and their performances are evaluated and improvements suggested based upon these common principles, so too can collaborative efforts of agencies and organizations be evaluated during exercises, planning processes, prevention initiatives and emergency and disaster response and recovery efforts.

The inclusion of these principles into the homeland security-training environment, and as a method to qualitatively evaluate collaboration among agencies and organizations across sectors and levels of government, are possible next steps for improvisation and homeland security.

D. METHODOLOGY

The narrative of multi-agency collaboration being infused with improvisational theater principles has, in fact, been told. I suspect it has been told many times, but I do not think the authors knew they were telling this narrative. One of these stories, and the narrative used to support my narrative and inform my recommendations, was the tragedy of The Deepwater Horizon drilling platform fire and subsequent oil spill. The Deepwater Horizon story is filled with examples of where each of the five principles of improvisational theater were utilized to facilitate collaboration, or where they could have been used to overcome challenges in the collaborative space. Deepwater Horizon also contained examples of a more traditional collaborative model, documented by Hocevar, Thomas and Jansen in their 2006 paper “Building Collaborative Capacity.” My narrative will experience conflict in the form of a comparison of the improvisational collaboration

model and the Inter-organizational Collaborative Capacity Model developed by S. Hocevar, G. Thomas and E. Jansen, 2006. Although good may be expected to triumph over evil, there will be no value placed on one model over another. Instead, this narrative will suggest that these two models can be alternative or even complimentary approaches to enhancing the collaborative multi-agency environment, with one not necessarily being superior to the other.

1. About Comparative Analysis

This narrative, which is essentially proposing a different approach to collaboration within the homeland security environment, will compare this new, different approach with a more widely accepted collaborative model. Since the term “homeland security” can have different meanings to different people, a specific frame of reference is needed, whereby the comparison of the collaborative models can occur. The Deepwater Horizon Oil Spill disaster will serve as the common reference point for the comparison of the two models.

In conducting this analysis, a “classic” comparison, as described by Harvard University’s Kerry Walk, 1998 will be used. This comparison will weigh each model equally and point out similarities, as well as differences, between the two models. Value judgments will not be placed on components of the models, as this paper is not meant to serve as a policy recommendation. It is my aspiration that at the end of this narrative, my reader sees two equally valuable models for facilitating collaboration in homeland security, one model being more familiar, the other, less so, but similarly valuable to the collaborative homeland security environment.

The comparison of the two collaborative models will follow a *point-by-point* organizational scheme. While this organizational scheme can come across as something of a tennis match with the comparison volleying back and forth between models, this narrative will examine the Deepwater Horizon Oil Spill disaster through the application of the Inter-organizational Collaborative Capacity model first, followed by an examination of the disaster through the application of the improvisational theater model. Those examinations will consist of an observation of the disaster as identified through

one of the disaster's incident reports or after-action reviews, then that observation is analyzed through a component of the given model.

Once each component of both models has been analytically applied to observations of the Deepwater Horizon Oil Spill disaster, the two models will be compared. This comparison will consist of a summary of each model's applicability to collaboration within the homeland security environment followed by an exploration of the similarities and differences between the models and how they both can be utilized to facilitate the development of the collaborative homeland security space.

2. About the Inter-organizational Collaborative Capacity Model

Hocevar, Thomas and Jansen (2008) have written extensively about collaboration, much of which pertaining to collaboration within the homeland security environment. This focus on homeland security allowed their collaborative model to emerge as an ideal comparison to the improvisational model proposed in this paper. They have defined their Inter-organizational Collaborative Capacity model as "the capability of organizations (or a set of organizations) to enter into, develop, and sustain inter-organizational systems in pursuit of collective outcomes" (Jansen et al., 2008). This framework also serves as a conceptual model to identify obstacles and enablers to the collaborative process (Martin, 2010).

This model provides five domains through which an organization's collaborative capacity can be assessed. The model can also serve as a guidepost of an agency or organization's efforts to improve its capacity to collaborate. Additionally, there are thirteen factors distributed throughout the five domains providing further assessment of collaborative capacity.

The five domains and thirteen factors of the Inter-organizational Collaborative Capacity Model are:

- Purpose and Strategy
 - Need to collaborate
 - Strategic collaboration

- Resource investments
- Structure
 - Structural flexibility
- Lateral Mechanisms
 - Social capital
 - Information Sharing
 - Collaborative Learning
- Incentives
 - Incentives and rewards systems
- People
 - Individual collaborative capacity

The five domains, along with the thirteen factors, are illustrated in Figure 1:

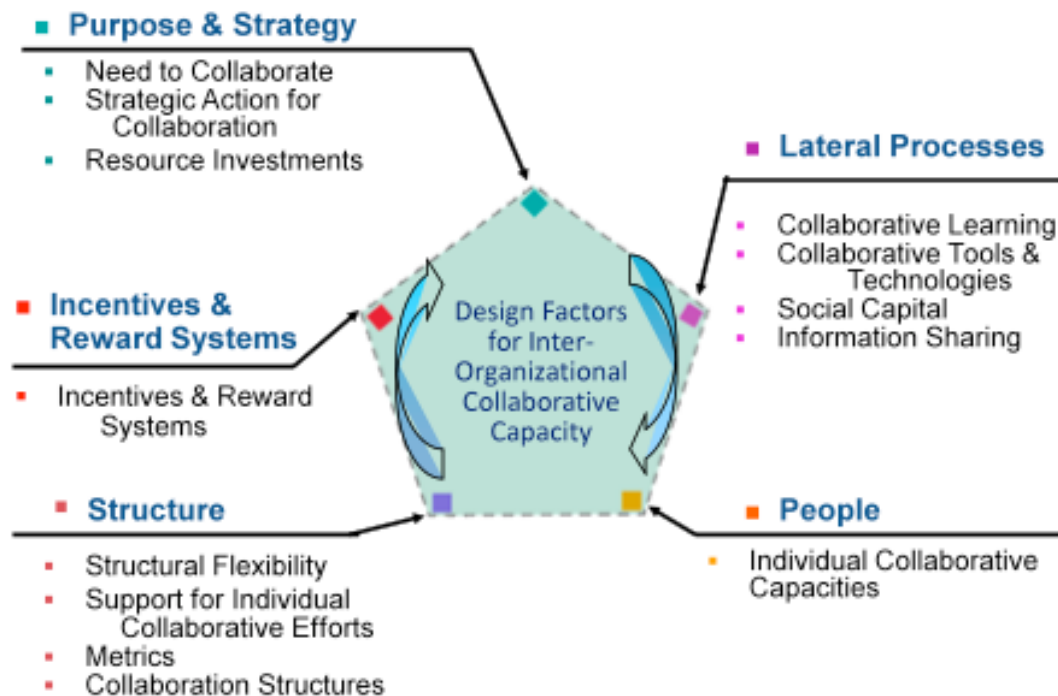


Figure 1. Inter-Organizational Collaborative Capacity Model: Domains and Factors
(From Hocevar, Thomas, & Jansen, 2011).

This model was developed following two studies of homeland security professionals during workshops meant to address the “how” of collaboration. Hocevar, Thomas and Jansen sought to better understand what enabled interagency collaboration and what barriers got in the way of the collaborative process (Hocevar et al., 2011). These enabling and inhibiting factors will be described in the next chapter.

3. About the Improvisational Theater Collaboration Model

The improvisational theater model consists of the five principles guiding improvisational theater performers described earlier in this chapter. This model frames these principles, so they are applicable to the collaborative nature of homeland security. Unlike the Inter-organizational Collaborative Capacity model, this model did not emerge through research or studies, but they resulted from an assignment for a homeland security class at the Naval Postgraduate School’s Center for Homeland Defense and Security in the fall of 2010. The assignment asked what I could teach homeland security. Not yet willing to consider myself a subject matter expert on much within the realm of homeland security, I recollected what I thought I knew better than most homeland security professionals: improvisation.

A cursory glance of homeland security and emergency management literature, and the application of homeland security, revealed papers written about improvising responses with limited resources or making decisions with limited information. Essentially, improvising solutions to homeland security problems. I did not think that I could teach homeland security practitioners how to do those things, so I set out to teach what I considered, based upon years of practical application and mentorship under one of the pre-eminent improvisational theater practitioners, directors, and theorists, to be the essential principles of improvisation. I was not sure how those principles could be applied to homeland security, but trusted, somehow, that they could. The encouragement of the homeland security professionals who read my initial effort and saw that there was something to the idea provided a degree of affirmation. I applied the “Yes, and...” principle to the idea that they could be applied.

“Improvisational theater principles have a place in homeland security. Yes, and that place is in the facilitation of the collaborative process.”

Through the course of the development of this paper, the idea that the principles of improvisational theater have a place in homeland security has been pushed, refined and expanded through the application of those very principles. This model is new, and not yet fully fleshed out as a functioning model, ready for battle, as it were. This model is in its infancy. Although this model has been applied through the course of this research to a case study, it is only one case study. The framework has not yet been applied to collaboration in the homeland security environment outside of the theoretical application to the case study. It is my hope that academics and practitioners who stumble across this paper will join me in continuing the research and development of this model as an alternative, innovative framework through which collaboration can occur.

E. SUMMARY

The homeland security enterprise has evolved over the past ten years through innovation and creativity. While there have been technological innovations that enhance the collaborative components of homeland security, the process of collaboration has been relatively untouched by innovation. The introduction of improvisational theater principles may improve the way homeland security agencies and organizations collaborate.

This thesis will propose an alternative framework for collaboration based upon the five principles of improvisational theater and apply that framework to the Deepwater Horizon disaster case study, an incident with unique and well-documented collaboration successes and shortcomings. Examples of the improvisational theater principles being used during the Deepwater Horizon disaster will be analyzed, as will examples where application of those principles may have improved response efforts. A more traditional collaboration framework, the Inter-organizational Collaborative Model, will be applied to the same case study utilizing the same approach: examples where Inter-organizational Model domains were used, and perhaps, where they could have been used. These two models will then be compared to the Improvisational Theater Collaboration Model through a comparative analysis of the two frameworks.

This thesis will culminate with a presentation of findings, answers to the research questions and suggest opportunities to apply the Improvisational Theater Collaboration Model.

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II. LITERATURE REVIEW

In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.

–Charles Darwin

In committing this narrative to paper, and in an effort to write economically while endeavoring to fill in any gaps in this narrative, I felt compelled to determine if mine was a story that even needed to be told. What is already known about collaboration among agencies is important in making that determination. That, then, is where I have started. What has been written about inter-agency collaboration, why is collaboration important for the homeland security enterprise, and what other models and theories are already used for collaborative decision-making are all questions that have been asked, and answered. I have included a review of the literature that addresses those questions.

A. SOME COLLABORATION KNOWN

1. Collaboration and Related Terms Defined

The Government Accountability Office has defined collaboration as “any joint activity that is intended to produce more public value than could be produced when the organizations act alone (United States Government Accountability Office, 2005). Donald P. Moynihan (2005) describes collaboration occurring between networked government organizations, which provide governments “the flexibility to tackle problems that are beyond the scope of any single organization”. There are also subtle differences between the use of the word *collaboration* and words like *coordination* and *cooperation*. Leo Denise describes coordination as beginning with an assumption of differences. Denise states

Different persons, different units, different units create overlap, redundancy, and/or separation without coordination. As in athletics, we are coordinated when the arms and legs move together everything falls together. Everything falls into balance, if not symmetry. Coordination is about efficiency... Coordination looks to inform each unit or part of the whole as to how and when it must act. Coordination is a framework used

to ensure that otherwise disparate forces will all pull in harness... In many cases coordination boils down to two conditions: That people and units know what they are to do and when they are to do it; and that they see the relationship between what they do and what the coordinated whole achieves... Coordination achieves efficiency of motion but tell us nothing about the consequence of motion. To speak of a well-oiled machine tells us that friction is reduced, but not that all results are achieved. (Denise, n.s., p. 2)

Denise describes cooperation as being important but points out divergence is equally important. Challenging norms and assumptions can be viewed as uncooperative, and notes creativity comes from dissent, disagreement, and even conflict. Cooperation, Denise asserts, can lead to “group-think” and reluctance for individuals to innovatively contribute to a discussion. Denise also describes cooperation as the opposite of competition, and that denying competitive impulses during the development of strategy can be a hindrance (Denise, n.d., p. 2).

Denise’s thoughts on collaboration focus on creation, as opposed to the focus of cooperation, which is agreement. Rather than striving to develop structural harmony, as coordination does, collaboration looks to entice spontaneity and divergent insights from those working within the collaborative space.

Michael Schrage describes collaboration as:

...the proves of shared creation: two or more individuals with complementary skills interacting to create a shared understanding that none had previously possessed or could have come to on their own. Collaboration creates a shared meaning about a process, a product, or an event. In this sense, there is nothing routine about it. Something is here that wasn’t before. (Schrage, 1990)

Another term referenced in this narrative is collaborative capacity. This has been defined as the “capability of organizations (or a set of organizations) to enter into, develop, and sustain inter-organizational systems in pursuit of collective outcomes” (Jansen, Hocevar, Rendon & Thomas, 2008, p. i). This capacity can be built and nurtured through the development of partnerships across all levels of government. These “vibrant” relationships include mutual dependency, a common purpose, trust and a long-term commitment to the partnership (Weber, Lovrich, & Gaffney, 2007). Hocevar et al. (2004,

2006, and 2008) have written at length on the notion of measuring an organization's capacity to collaborate. Their research, utilizing homeland security subject matter experts, has led to their development of a collaboration model that can identify and assess an organization's collaborative capacity.

Collaboration requires more than one participant, is used to achieve a goal, whether that goal is a plan, policy, or operational objective, and when effective, acts as a force-multiplier, creating better results than an individual agency or organization could have achieved on their own.

2. Homeland Security and Collaboration

Over the past ten years, homeland security policy has been driven from the national level. Strategic documents and presidential directives have laid the foundation for much of what the homeland security enterprise does at the local, state and federal level. These policies, strategies and directives are outlined below as they relate to collaboration within the homeland security enterprise.

Among the homeland security policies and strategies developed at the national level since 2001 are the two National Strategy for Homeland Security documents released in 2002 and 2007, the Homeland Security Presidential Directive-5 from 2003, the National Incident Management directives originally published in 2004 and revised in 2008, the Quadrennial Homeland Security Review from 2010, Presidential Policy Directive 8 from 2011, which replaced the Homeland Security Presidential Directive-8 from 2003; and, the National Response Framework from 2008, which replaced the National Response Plan from 2004.

There are at least seven definitions of homeland security (Bellavita, 2008). In the next paragraph, I will propose an eighth. The 2002 and 2007 National Strategies for Homeland Security defines Homeland Security as "...a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from the attacks that do occur" (DHS, 2002; DHS, 2007). The 2010 Quadrennial Homeland Security Review (QHSR) was written as a "strategic framework to guide the activities of participants in homeland

security towards a common end” (DHS, 2010), and served as the Obama Administration’s homeland security strategic document. The QHSR does not offer the concise homeland security definition put forth in the 2002 and 2007 Strategies, but provides several paragraphs describing homeland security as “an intersection of evolving threats and hazards,” which includes combining law enforcement, emergency response, civil defense, customs, border patrol, and immigration responsibilities under “one overarching concept” to “breakdown longstanding stovepipes that have been and could still be exploited by those seeking to harm America” (DHS, 2010). The QHSR includes disasters (without specifying naturally-occurring or man-made) as a role statutorily assigned to the Secretary of the federal Department of Homeland Security.

These definitions of, or efforts to define, homeland security, focus almost entirely on terrorism. Yet, the homeland security enterprise also contends with traditional crime, immigration and border patrol issues, natural disasters and accidental man-made emergencies and their impact on lives, property and the economy. In examining the creation of the federal Department of Homeland Security,³ language from national homeland security strategic documents, and policy directives, homeland security is less about a particular threat, hazard, discipline, agency, cause, or consequence and is entirely about coordinating efforts of multiple entities. In his book *Systems Under Stress*, Donald F. Kettl described homeland security as being primarily about multi-agency coordination, complex partnerships across all levels of government, and complex links between the private and public sectors. I concur with this description of the fundamental trait of homeland security. Therefore, when referencing homeland security in this narrative, I will be referring to the following definition:

*Homeland security is the collaborative effort of agencies and organizations, with a public safety mission or interest, as they carry out their specific public safety role.*⁴

³ The creation of the Department of Homeland Security in 2002 combined previously separate agencies within several federal departments into a single department, in an effort to “further unify and coordinate national homeland security efforts” (http://www.dhs.gov/xabout/history/gc_1297963906741.shtm).

⁴ As used in the context of this definition, the term “public safety” refers to the provision of protection against events that could cause damage to property or infrastructure or harm to the general public as a result of crimes, emergencies or disasters, both naturally-occurring or human-caused.

Defining homeland security is a story in and of itself but providing the working definition above allows for some clarity in this narrative and the perspective from which homeland security is viewed as this narrative is told, and the basis for framing the supporting the hypothesis.

The National Incident Management System, or NIMS, was developed to provide a “consistent nationwide template to enable federal, state, tribal, and local governments, nongovernmental organizations (NGOs), and the private sector to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity” (DHS, 2008, p. i). To that end, NIMS states:

A comprehensive national approach, applicable at all jurisdictional levels and across functional disciplines, improves the effectiveness of emergency management/response personnel across the full spectrum of potential incidents and hazard scenarios (including but not limited to natural hazards, terrorist activities, and other manmade disasters). Such an approach improves coordination and cooperation between public and private agencies/organizations in a variety of emergency management and incident response activities. The *National Incident Management System* framework sets forth the comprehensive national approach. (DHS, 2008, p. 5)

Building upon the importance of collaboration outlined in the NIMS, the 2010 Quadrennial Homeland Security Review contends:

Preserving continuity of government is essential to the stability of the Nation. Detecting, disrupting, and responding to crises under any contingency requires collaboration throughout the homeland security enterprise. (DHS, 2010, p. 43)

At least two Government Accountability Reports have included recommended actions for agencies to take in order to improve their ability to collaborate. A 2005 GAO report, *Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration Among Federal Agencies*, recommended the following practices to improve interagency collaboration among federal agencies:

- Define and articulate a common outcome;
- Establish mutually reinforcing or joint strategies;
- Identify and address needs by leveraging resources;
- Agree on roles and responsibilities;
- Establish compatible policies, procedures, and other means to operate across agency boundaries;
- Develop mechanisms to monitor, evaluate, and report on results;
- Reinforce agency accountability for collaborative efforts through agency plans and reports;
- Reinforce individual accountability for collaborative efforts through performance management systems.

These recommendations were supported in a second GAO report in 2010, which cited four actions agencies should take to improve interagency collaboration for national security. These actions include:

- Develop and implement overarching strategies
- Create collaborative organizations.
- Develop a well-trained workforce.
- Share and integrate national security information across agencies.

These inhibiting and facilitating factors to collaboration provide an understanding of what collaboration may be and begins to drift towards how to collaborate. But recommendations like “create collaborative organizations” are still putting the proverbial cart before the horse. How those organizations are to be created is still largely unknown.

The administration of President Obama appears to be continuing down the path of emphasizing the importance of collaboration to our nation’s homeland security efforts. President Obama’s 2011 Presidential Policy Directive- 8 (PPD-8) stressed concepts like “all-of-Nation” capabilities and states “Our national preparedness is the shared responsibility of all levels of government, the private and nonprofit sectors, and individual citizens” (Obama, 2011). The National Preparedness Goal, which was mandated through PPD-8, describes the importance of collaboration when stating the

security of the homeland “requires the execution of terrorism prevention through extensive collaboration with government and nongovernmental entities, international partners, and the private sector” (U.S. Dept. of Homeland Security, p. 4).

While these policy and guidance documents speak to the need to collaborate, for the practitioner the reasons for collaboration come less from doctrine developed in Washington and more from the understanding that often times a single agency, organization, or jurisdiction cannot reach the desired outcome or resolution of an incident, emergency or wicked problem on their own. Tangible benefits like equipment or subject matter expertise and intangible benefits like increased organizational credibility may motivate inter-agency collaboration (O’Leary & Bingham, 2009). While the motivation behind collaborations may vary, agencies sometimes collaborate solely because they are “unable to accomplish their goals unilaterally, either because they do not exercise complete authority over the policy area or because they lack important resources” (O’Leary & Bingham, 2009, p. 33).

These policy, guidance and strategy documents contain multiple references to “what” of collaboration within the homeland security enterprise, but they do not identify strategies for achieving them, or the “how.”

3. Collaboration Theory

The homeland security enterprise is wrought with wicked problems, and as noted in *Megacommunities* (Gerenscer, Van Lee, Napolitano, & Kelly, 2008), propose the concept of collaboration via the “megacommunity” to address these difficult to solve problems. The examination of three organizational collaborative theories and the distillation of their components or structures will help frame this narrative’s development of improvisational theater as a collaborative organizational theory and offer alternative perspectives of how agencies collaborate.

Eugene Bardach offers an inter-organizational collaborative theory that follows the metaphor of construction workers building a home (Bardach, 1998). Bardach acknowledges his theory relies on the possibility that there may be hundreds of individuals needed to effect the building of inter-organizational collaborative capacity,

and that his theory leads to the “possibility, and indeed the probability, of creative, purposive, human action (Bardach, 2001, p. 151).

As a house is built foundation first, then the framing of the walls, then the roof, then interior fixtures, so too is Bardach’s Craftsmanship theory. Each component must be laid in order to facilitate the collaborative process (Bardach, 1998). Without the foundation, the walls cannot be framed. Without walls, the roof cannot be built, and without a roof, any interior work will be compromised. For Bardach’s model, the foundation consists of the following factors:

- Creative Opportunity
- Intellectual Capital
- Implementation Network
- Advocacy Group
- Trust
- Acceptance of Leadership
- Communication Network

The “walls and roof” of this theory are comprised of the factors below:

- Improved Steering Capacity
- Operating Subsystem
- Continuous Learning

This building-block theory of inter-organizational collaboration is illustrated in Figure 2:

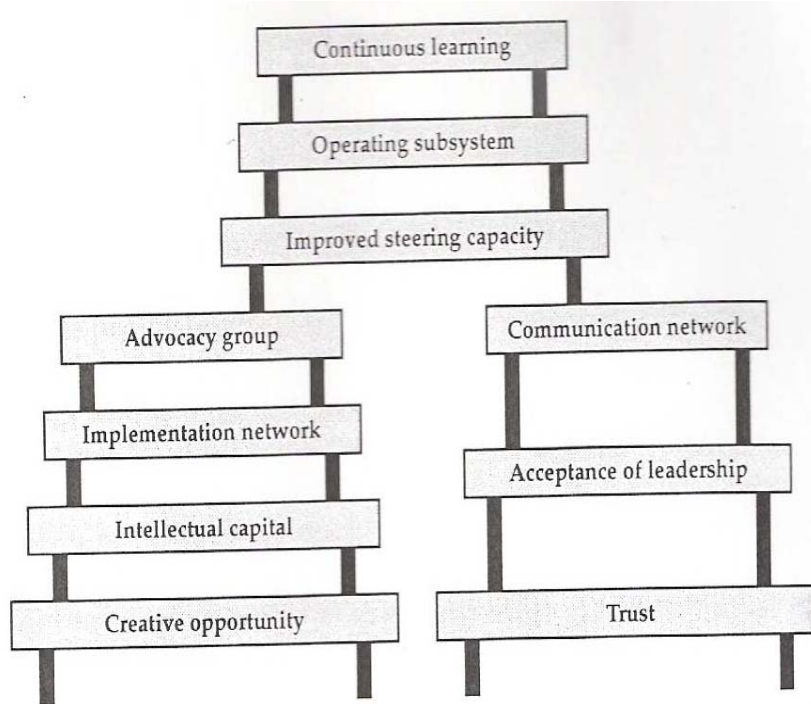


Figure 2. Bardach's Craftsmanship Theory Platforms (From Bardach, 1998, p. 274)

The factors in Bardach's theory can be applied to the homeland security environment, and they are particularly useful during the development interagency coordination systems. Table 1 depicts the foundational factors, as they may be applied in the homeland security context:

Table 1. Bardach's Craftsmanship Theory for Homeland Security

Factor	Homeland Security Application
Creative Opportunity	A perceived gap is identified in the nation's ability to warn its citizens of a pending terrorist attack.
Intellectual Capital	Resources of the U.S. Attorney General's office are charged with designing a national terrorist alert system.
Advocacy Group	Homeland security and law enforcement professionals around the country recognize and communicate the value of such a warning system to the public.
Trust	The new alert system warning level is only raised or lowered when credible intelligence dictates, never for political reasons.
Acceptance of Leadership	This top-down warning system, which can only be adjusted by the President, is acknowledged as effective.
Communications Network	Agencies and organizations within the Intelligence Community have mechanisms in place to communicate potential triggers to raise or lower the alert level.

Barbara Gray (1985) suggests an approach that focuses on collaborating organization's interdependency on one another. Gray's model describes three phases of collaboration:

- Problem Setting
- Direction Setting
- Structuring

The Problem Setting phase identifies the problem that has brought the collaborative entities together and establishes the reason for entering the collaborative space. This phase also allows agencies or organizations to recognize their interdependence on one another. The Direction Setting phase is the period in which mutually agreed upon goals are established and expectations of the desired outcome are communicated. The Structuring phase is used to develop processes and mechanisms for

inter-organizational communication and decision making. From the homeland security perspective, these three phases are often present in the collaborative environment, whether during a small incident, large-scale disaster or inter-agency planning initiative. An example of the Gray Model applicability to homeland security is depicted in Table 2.

Table 2. Gray Model of Collaboration for Homeland Security

Phase	Homeland Security Application
Problem Setting	During a pandemic outbreak, the Governor of a rural state recognizes the need to maintain government-sponsored food and nutrition programs. Responsibility for these programs falls to many state agencies, and additional agencies are needed to provide subject matter expertise on the nature of the pandemic and logistical support for maintaining these programs.
Direction Setting	Stakeholder agencies, including Departments of Health, Education, Emergency Management, Aging and Long-Term Services, Agriculture, and Children, Youth, & Families come together to define the problem (maintaining food services to at-risk populations) and the role each agency is to play in developing a solution to that problem. Agencies also agree upon desired outcomes of this collaborative effort, in this case, maintaining current level of service through government-sponsored food and nutrition programs and the potential need to increase service to meet increased demand for these services should the pandemic worsen.
Structuring	Agencies identify representatives, establish communication procedures (such as standing meetings, briefings, or teleconferences), create a web-based platform for sharing information as the pandemic develops, and establishes an inclusive decision-making command structure.

Much has been written about the factors that enable or inhibit collaboration. Hocevar, Thomas, and Jansen, in the development of the Inter-organizational Collaborative Capacity model, studied the necessary elements for collaboration and barriers to collaboration in great depth. Hocevar et al.'s study was based upon a series of questions posed to homeland security professionals and their experiences with

collaboration in the preparedness phase of their work (Hocevar et al., 2006). This focus on the homeland security enterprise in developing their collaborative capacity model led to my selection of their Inter-agency Collaborative Capacity model as a comparison for the Improvisational Theater Collaboration Model.

In her research building upon the research of Hocevar, Thomas, and Jansen exploring the impact of incentives and requirements for collaboration, Jardine (2010) identified some common inhibitors to the collaborative process. These barriers include:

- Territorialism
- Competing priorities and objectives
- Unclear roles and responsibilities
- Lack of accountability
- Mistrust
- Competition for resources
- Lack of knowledge of a partner's capabilities

These barriers are in alignment with some of the observations made by Thomas, Hocevar, and Jansen in their 2004 paper that found impediments to collaboration included:

- Divergent goals
- Focus on local organization over cross-agency (e.g., regional) concerns
- Lack of goal clarity
- Not adaptable to interests of other organizations
- Impeding rules or policies
- Inadequate authority of participants
- Inadequate resources
- Lack of accountability
- Lack of formal roles or procedures for managing collaboration
- Lack of familiarity with other organizations
- Inadequate communication and information sharing (distrust)

- Competition for resources
- Territoriality
- Organization-level distrust
- Lack of mutual respect
- Apathy
- Lack of competency
- Arrogance, hostility, animosity

Conversely, the research by Hocevar, Thomas, and Jansen (2006) found the following to be contributing factors to collaboration:

- “Felt need” to collaborate
- Common goal
- Willingness to address other agency’s interests or cross-agency goals versus local organizational goals
- Formalized structure for coordination (e.g., committee or liaison roles)
- Formalized processes (meetings, deadlines, agendas)
- Sufficient authority of participants
- Role clarity
- Dedicated assets (people, resources) for collaboration
- Social Capital (i.e., interpersonal networks)
- Effective communication and information exchange
- Technical interoperability
- Combined training events
- Collaboration as a prerequisite for funding or resources
- Respect for other parties’ interests, expertise, roles, and perspectives.
- Perseverance/Commitment

Hocevar, Thomas, and Jansen have defined their Inter-organizational Collaborative Capacity model as “the capability of organizations (or a set of organizations) to enter into, develop, and sustain inter-organizational systems in pursuit

of collective outcomes” (Jansen et al., 2008). This framework also serves as a conceptual model to identify obstacles and enablers to the collaborative process (Martin, 2010).

This model provides five domains through which an organization’s collaborative capacity can be assessed. The model can also serve as a guidepost of an agency or organization’s efforts to improve its capacity to collaborate. Additionally, there are thirteen factors distributed throughout the five domains providing further assessment of collaborative capacity.

The “Purpose and Strategy” domain refers to an organization’s ability to recognize its interdependence among other agencies and organizations, and its acknowledgement of the need to collaborate in order to achieve its goals and objectives. This domain also refers to the strategic importance an agency or organization’s leadership places on collaboration and the commitment of resources to the collaborative process (Hocevar et al 2011). This domain stresses the importance of an organizational culture that accepts and contributes to the notion of shared power, ideas, goals and objectives (Jardine, 2010).

The “Rewards Systems” domain seeks out opportunities for financial, resource, or promotional incentives offered for collaboration, or the need for evidence of collaboration to receive grant funding (Hocevar et al., 2006, 2011). This domain supposes that the use of mandates or incentives can be used to increase collaboration in instances where collaborative capacity is otherwise lacking (Jardine, 2010).

The “Structure” domain considers the presence of liaisons, interagency teams and task forces, or other formal structures to facilitate the collaborative process. This domain includes the need for flexibility within those structures, performance standards and established criteria to evaluate interagency collaboration, and the existence of goals, constraints, and authorities for individual collaborative efforts (Hocevar, 2011). Jardine (2010) describes the support of leadership as an important factor in this domain.

The “Lateral Process” domain is comprised of what Hocevar et al. refer to as “hard” and “soft” aspects of lateral coordination (2011). The positive, interpersonal relationships that foster trust, open communication and information sharing lead to the

development of social capital, a major component of this domain (Jardine, 2010). Professional and social relationships, technology like email, video conferencing, and web-based planning platforms, the importance organizations place on information sharing, and collaborative learning like inter-agency training and multi-agency exercises comprise this domain (Hocevar et al., 2011). Institutionalize relationships like governance structures, mutual aid agreements and operational procedures also fall under this domain (Jardine, 2010).

The fifth domain, “People,” refers exclusively to the collaborative ability of individual members of organizations. Conflict management skills, a willingness to share ideas and knowledge and understanding of how their organization operates in conjunction with respect for the expertise brought to bear by those in collaborative partner organizations are factors of this domain (Hocevar et al., 2011).

Table 3 illustrates the applicability of the Inter-organizational Collaborative Capacity model to homeland security:

Table 3. Inter-organizational Collaborative Capacity Model for Homeland Security

Domain	Homeland Security Application
Purpose and Strategy	During a large wild fire, a small jurisdiction quickly becomes overwhelmed, requiring additional resources to meet the incident objectives.
Reward System	As a condition of grant funding, surrounding jurisdictions make their equipment and personnel available for firefighting operations.
Structure	The existing intra-state mutual aid system allows resources to be tracked and documented as the move from providing jurisdiction to the impacted jurisdiction.
Lateral Process	The impacted jurisdiction allows incident command team trainees to shadow their personnel on the fire, gaining valuable experience and increasing future capacity to manage such large events within the region.
People	Pre-incident inter-agency and inter-jurisdictional planning, training, and exercises have created strong relationships between the individuals within the collaborating agencies.

B. SOME COLLABORATION UNKNOWNNS

As important to my narrative as what is known about collaboration is what is not known. The unknown I am most concerned with as a storyteller is the plausibility of my narrative. Since my story is about the solving a homeland security problem through application of the principles of improvisational theater to multi-agency collaboration, needed to discover if that narrative already been told? If it has not, why not? If it has, did the narrative make any sense? Based upon the body of literature examined for this narrative, I have determined parts of this narrative can be found in other stories, but it has not yet been put together in the way I am proposing. Models have been applied to collaboration, homeland security has been described as a collaborative process, and improvisational theater performers and teachers recognize the collaborative nature of their work. But the narrative of transforming the collaborative principles of improvisational theater into a model, which is then applied to homeland security, has not yet been told.

The Inter-organizational Collaborative Capacity model offers a strategy for developing collaborative capacity within the homeland security enterprise, and the model's use of five domains of collaboration provide some direction for the homeland security practitioner to increase the collaborative capacity of their organization (Hocevar et al., 2006). This paper seeks to add to the "how to collaborate" literature through the introduction of a collaborative model based upon the principles of improvisational theater.

C. IMPROVISATIONAL THEATER

1. About Improvisational Theater Performance

Frank J. Barrett's 1998 paper, "Creativity and Improvisation in Jazz and Organizations: Implications for organizational Learning," suggests jazz improvisation exemplifies organizations designed for learning and improvisation. Barrett outlines seven characteristics of jazz bands that allow them to do what managers of organizations often do: invent paths forward without prior knowledge of the outcome and realizing the outcome only as it reveals itself (Barrett, p. 605). Improvisation, whether performed by

actors or a jazz trio as Barrett describes, “represents the human capacity to think freshly, to generate novel solutions, (and) to create something new and interesting” (Barrett, p. 620). This paper follows Barrett’s lead but looks at the world of improvisational theater, as opposed to improvisational jazz, to find components that can be applied to homeland security organizational collaboration.

Improvisation as a theatrical performance style can trace its roots back to the *Commedia Dell'Arte*, a popular form of theater begun in Italy performed throughout Europe during the sixteenth and seventeenth centuries. Performers would perform entire plays through improvisation. Like today’s improvised theater, the performers would be given a scenario to guide their performance (Hartnoll, 1985). Unlike today’s improvisational theater, *Commedia* actors would generally portray the same character throughout their career and would wear masks associated with that character. *Commedia Dell’arte* as a performance style was perhaps best documented at the time by Andrea Perrucci, a Sicilian lawyer who penned *Dell’arte Rappresejtatva (The Art of Staging Plays, Premeditated and Improvised)*, in which much of the text is devoted to his belief that improvisation is superior to other acting styles (Brown, 1997). *Commedia* is said to have influenced the work of William Shakespeare, Molière, puppets Punch and Judy and twentieth century performers like Charlie Chaplin and the Keystone Cops (Hartnoll, 1985). The idea of a narrative set around a basic plot idea with no set dialogue established the framework used but the United States’ first improvisational theater, The Compass (Fotis, 2005).

Improvisation as a performance style in the United States was first developed in the United States by Paul Sills and David Shepherd who co-founded The Compass Theater in Chicago in the mid-1950s (Spolin, 1999). This theater was built around the work of two sisters, Neva Boyd and Viola Spolin, and their use begun in 1938, of games, story-telling and drama to spark creativity in children and adults through the Works Progress Administration’s recreational Training School, also in Chicago. These games were originally designed as a tool to teach drama to lower-income children in Chicago’s West Side (Coleman, 1990). This work laid the foundation for the Young Actors Company in Hollywood, California, where these games were used as rehearsal tools

during the development of plays (Spolin, 1999). About the same time Sills and Shepherd were working on the Compass Theater in Chicago, Keith Johnstone was simultaneously, and unknowingly, developing a similar style of performance in England (Johnstone, 1979).

Improvisational theater has been defined as “A form of unscripted performance that uses audience suggestions to initiate or shape scenes or plays created spontaneously and cooperatively according to agreed-upon rules or game structures, in the presence of an audience—frequently resulting in comedy” (Seham, 1997). While this definition is not comprehensive, nor does it describe every type of improvisational theater performance, this definition accurately describes how improvisation is generally practiced in the United States, and the style of improvisation most often performed.

Improvisational theater requires a performer to listen to what is being said by his or her fellow players, observe what they are doing, as often times props are created through pantomime, and they must remain flexible, as preconceived narratives are derailed as soon as another player does or says something that is not part of the imagined “script.” While improvisation can often lead to humorous scenes and situation, it is not necessarily a comedic genre. Improvisation is not necessarily intended to be comedic, but rather, a collaborative story-telling effort that is generated through the input of each player.

2. Improvisational Theater Theory

Spolin, Sills, and Johnstone each use games as a way to introduce and develop the improvisational skills of performers. Since an improviser cannot rehearse a performance the way a scripted theater performer can (learning lines of dialogue, entrance and exit cues, etc.), the director can instead coach the improvisers through rehearsal periods through theater games, reinforcing the principles of improvisational theater. Much of the literature about improvisation is written for the improvisational performer, not for a scholarly analysis of the style. This literature, however, is useful in distilling the theories of some of the leading improvisational theater practitioners.

In her book “Improvisation for the Theater,” Viola Spolin begins by saying “everyone can improvise.” This premise has been the centerpiece to her approach to improvisation and the development of theater games, improvised exercises originally intended to help rehearse scripted theater performances. Although Spolin avoids the term “rules” when instructing on the implementation of improvisation as a rehearsal tool, she does offer several “reminders and pointers.” Among these “pointers” are:

- Be flexible
- Any player who “steals” a scene is a thief
- Any player who feels urgent about a game and plays it alone does not trust his fellow players
- No one player can decide that a scene (game) is ended
- When players are always alerted and willing to come to each other’s aid as needed, each member of the cast is given a sense of security
- Without the other player, there is no game
- No one knows the outcome of a game until one plays it
- Scene improvisation can only evolve out of group agreement and playing

Since the original intent of these improvisational games was for use during rehearsal, Spolin, and later, Sills, rely heavily on side-coaching during these games. Side-coaching terms like “give and take” can remind the improviser to be aware and inclusive of the other performers, and comments like “No playwrighting” reminds the improviser to allow the narrative to emerge from what is being presented.

Keith Johnstone’s book *Impro* (1979) includes three chapters dealing specifically with his approach to improvisation: Status; Spontaneity; and Narrative Skills.

Johnstone’s chapter on Status delves into the importance of relationships, and the status of one player, or character, to another. Examples Johnstone provides of status in relationships include master and servant, wealthy and poor, knowledgeable and ignorant. Understanding the dynamics of status within a relationship, Johnstone states, is critical as this “pecking order” affects even the smallest details of our behavior. This idea about relationships and status, especially in the realm of improvisation, speaks to the notion of

being changed, in some way, by what has been presented. If in an improvisation, an actor refers to someone as “your majesty,” the improviser referred to as “your majesty” must then alter any preconceived ideas about where the scene may have been headed, and embrace being majestic.

In his discussion about spontaneity, Johnstone links creative impulses to the spontaneity necessary for improvisation. Johnstone cites an exercise he has used in class to foster spontaneity and mitigate self-censorship wherein a student is asked to imagine a box, and then asked, what is inside the imagined box. Hesitation, Johnstone notes, is often evident and indicative of someone not allowing themselves to be spontaneous and instead, censoring their first thought or instinctive answer. Johnstone also refers to blocking, or saying “No,” as a form of aggression and an artificial injection of conflict into a scene. More ideas and increased spontaneity occurs, if ideas are accepted. Johnstone believes this leads to the impression that improvisers have planned what it is they are going to do, when in fact they have not.

The narrative, or story, of the improvisational performance, can fall into many traps, if any of the concepts mentioned previously are not followed. Johnstone describes an improviser as someone walking forward while facing backwards. The improviser must be able to see what action has occurred in the past but must always be moving into new space, or continue to allow the narrative to progress, not regress. Speaking to the collaborative nature of improvisation, Johnstone says, “Anyone who tries to control the future of the story can only succeed in ruining it.” Allowing the narrative to emerge organically from the words and actions of each player, and to keep the narrative moving forward, is the only way to achieve a truly improvised story.

One of the research questions in Chapter I asked, “Are the principles of improvisation fairly consistent among the leading improvisational theater practitioners?” The writings and teachings of Keith Johnstone, Viola Spolin, and Paul Sills, although phrasing their improvisational philosophies differently, all espouse the same basic principles: Progress the narrative or action, accept offers by saying “yes,” do not ignore what is happening around you, there are no mistakes, and serve the story and your fellow players.

D. SUMMARY

Among the vast body of literature that has been written about inter-agency collaboration are policies, doctrine and directives from the federal government mandating collaboration within the homeland security enterprise. Researchers have also explored theories of inter-organizational collaboration, and this paper examined several, focusing most closely on the work of Hocevar, Thomas, and Jansen and their Inter-organizational Collaborative Capacity model, as it was developed utilizing homeland security professionals as research subjects.

The importance of collaboration to the homeland security enterprise, though well documented in policy, extends beyond federal mandates and lies instead with the understanding by those operating within homeland security environment that many of the wicked problems faced by the enterprise cannot be solved by a single agency.

Improvisational theater, when viewed as an unscripted style of storytelling, offers well-established guiding principles that improvisational theater performers adhere to when crafting a narrative. Transposing these principles onto the homeland security enterprise, and applying these principles as if each agency or organization within a homeland security collaborative space were a performer in an improvised scene, offers a model for homeland security practitioners to collaborate in the multi-agency, multi-jurisdictional environment that often defines homeland security and may be necessary to address the wicked problems.

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III. DATA

Don't find a fault. Find a remedy.

—Henry Ford

Multi-agency collaborative efforts can be difficult to quantify. How many agencies or organizations participated in collaborative meetings or discussions can certainly provide a number, but it does not speak to the efficacy of the collaboration. As J. E. Obrien noted in his paper, *Essential Elements for Preparedness Planning*, “The fact that people are meeting together does not necessarily indicate that collaboration is occurring” (2006, p. 28). It is important to determine whether or not the right agencies or representatives involved. Did any agency, organization, or jurisdiction not sit at the table that should have? Did the collaboration lead to a decision or was the decision made prior to the establishment of the collaborative space? Some of the most useful data pertaining to collaboration and the answers to the previous questions in a homeland security environment can probably be found within incident reports and after action reviews. The analysis of after-action reports through the application of two collaboration models will demonstrate the applicability of these models to multi-agency collaboration, and the utility of both models.

A. ABOUT INCIDENT REPORTS AND AFTER ACTION REVIEWS

This data, culled from incident reports and after-action documents, come from four sources, with each source drawing from media reports, interviews, and communications during the Deepwater Horizon disaster. Two of the reports comprising the data set were generated by, or at the behest of, the United States federal government. These are the *On Scene Coordinator Report Deepwater Horizon Oil Spill* by the United States Coast Guard, and the *BP Deepwater Horizon Oil Spill Incident Specific Preparedness Review*, a collaborative effort in itself, drafted through a partnership among several federal and state agencies. The third report used in this data set is the after-action

review report/improvement plan created by the Florida State Emergency Response Team (SERT), *Deepwater Horizon Response*.

After-action reviews as a performance analysis tool can follow their roots back to the oral histories provided by soldiers following their engagement in combat. Journalist and historian S. L. A. Marshall conducted these “interviews after combat,” where questions meant to reconstruct battles from memory were asked to soldiers involved in those battles. This practice continued through the Korean Conflict and war in Vietnam (Morrison & Meliza, pp. 5–6). These oral histories evolved into performance critiques developed by the U.S. Army to obtain feedback from exercises through the 1960s, and evaluated outcomes of simulated battles (Morrison & Meliza, p. 6). The subjectivity and, at times, negative tone of some performance critiques, the U.S. Army combined the approach of Marshall with a less-negative performance critiques to create the Tactical Engagement Simulation to provide more objective feedback to soldiers. This method became known as the After Action Review (Morrison & Meliza, p. 7). The After Action Review continues to be used and refined by the U.S. Army (Mastaglio et al., p. 1), which released the *Leader’s Guide to After Action Reviews* in 1993 (U.S. Army, 1993).

After-action reports generally seek to answer three questions: 1) What worked well? 2) Where were the gaps? and 3) What can be done differently in the future to improve performance? (Kaliner, p. 14). Incident reports follow a similar construct to after-action reviews, and therefore are included as data for analysis of collaboration in the Deepwater Horizon disaster. Over the past ten or so years, the U.S. government has formed several commissions to examine disasters, provide an accounting of the event, and suggest recommendations based upon their findings. Perhaps most notable in recent history are the *Final Report of the National Commission on Terrorist Attacks Upon the United States* and the *Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*. In the 9/11 Commission Report’s preface, co-chairs Hamilton and Kean say that their “...aim has not been to assign individual blame. Our aim has been to provide the fullest accounting of the events surrounding 9/11 and to identify lessons learned” (National Commission, 2004).

Similarly, the Hurricane Katrina Commission's report *A Failure of Initiative* stated in its preface,

The Select Committee has spent much of the past five months examining the aftermath of this catastrophic disaster. It has become increasingly clear that local, state, and federal government agencies failed to meet the needs of the residents of Louisiana, Mississippi, and Alabama. It has been our job to figure out why, and to make sure we are better prepared for the future.

Our mandate was clear: Gather facts about the preparation for and response to Katrina, at all levels of government.

Investigate aggressively, follow the facts wherever they may lead, and find out what went right and what went wrong. Ask why coordination and information sharing between local, state, and federal governments was so dismal. (Hurricane Katrina Commission, 2006)

Although the Katrina Commission appears to be targeting government across all levels, the goal of each report was less to assign blame and more to prevent repetition of problems or gaps during similar incidents. That is the function of the after action review and the three additional reports used to provide the data that will be analyzed for collaborative occurrences and opportunities during the Deepwater Horizon disaster.

B. WHY DEEPWATER HORIZON?

The explosion, fire and sinking of the Deepwater Horizon drilling unit and subsequent massive oil release at the Macondo oil well in the Gulf of Mexico off the Louisiana coast is as unique of a disaster as any that has occurred in the United States. This disaster was selected as a case study for examination into the applicability of improvisational theater principles to multi-agency coordination for several reasons. This disaster started as a very localized incident, limited to less than a square mile of sea. Within a matter of days, however, Texas, Louisiana, Mississippi, Alabama and Florida were feeling the effects of the disaster via oil washing up on their shores, and some modeling showed the oil spreading up the eastern seaboard towards New York and Canada and impacting island nations in the Caribbean Sea as well (UCAR, 2010). Although 11 lives were lost and 17 rig workers were injured during the Deepwater Horizon (Deepwater Horizon Commission Report, p. 191), the greatest impacts of this

disaster were economic and environmental, costing billions of dollars to tourism and commercial fishing operations, and impacting coastal ecosystems from Louisiana to Florida along the Gulf Coast (U.S. Dept. of Commerce, 2010). The public safety impacts of this disaster were secondary to the economic damages.

The importance of the Deepwater Horizon tragedy to my narrative, however, lies primarily in the unprecedented coordination and collaboration required for the response and recovery for this disaster. This disaster was the result of private sector activities, activities for which the federal government had oversight. The federal government was responsible for managing the response and recovery efforts associated with the disaster (not the same agency that had regulatory oversight- the Department of Interior's Minerals Management Service, but the Department of Homeland Security's United States Coast Guard) (Deepwater Horizon Commission Report, p. 65). Although the federal government was responsible for the recovery, most of the equipment and technology needed for the recovery and clean-up efforts belonged to private sector entities. The spread of oil from the blown-out well in the Gulf of Mexico eventually reached the United States, impacting state, tribal and local governments across four of the states bordering the Gulf. The financial hardships felt by those who made a living from the Gulf of Mexico, either through commercial fishing or shrimping operations or tourism, were severe. In many cases, these businesses and individuals relied upon assistance from private, nonprofit and nongovernmental organizations to mitigate the consequences the disaster had on their livelihood.

In addition to the multiple levels of government and private sector involvement, this disaster, which began on April 20, 2010 (Deepwater Horizon Commission Report, p. xiii), did not cease response operations until October 1, 2010, 131 days after the initial explosion (Deepwater Horizon Commission Report, p. 170). The huge geographical area of this disaster, the economic and environmental impact, and the necessary coordination among local, state, federal and private sector organizations and agencies makes this incident a unique example of multi-agency coordination and is illustrative of the need for collaboration during a disaster.

C. DEEPWATER HORIZON REVIEW

The tragedy of the deepwater horizon, from the days leading up to the disaster as the well was being drilled to the ongoing recovery efforts, have been well documented in official government reports, media accounts and personal stories. The multiple facets of this story, the plot turns, characters, conflicts and climax are too numerous to detail here. However, to frame this tragedy as a case study in collaboration, a familiarity of the nature of this disaster, how it unfolded, and some key narrative elements are necessary. The following timeline depicts the major events and milestones in the Deepwater Horizon disaster at the Macondo well site in the Gulf of Mexico as documented in the U.S. Coast Guard's *On-scene Coordinator Report: Deepwater Horizon Oil Spill* (2011).

- April 20, 2010: At approximately 10:00 pm local time, an explosion occurs aboard the Deepwater Horizon well drilling unit.
- April 20, 2012: Moments after the explosion, the United States Coast Guard District 8 Command Center in Louisiana is notified of the incident, and a search and rescue mission is launched.
- April 21, 2012: 115 of the 126 workers on board the Deepwater Horizon at the time of the explosion have been accounted for, many are injured and receiving treatment in hospitals. The drilling unit continues to burn, and begins to list in the water.
- April 22, 2010: Dispersants begin being used to for the first time on crude oil leading from the Macondo well as the Deepwater Horizon drilling unit sinks.
- April 23, 2010: A Unified Area Command is established in Robert, Louisiana with an Incident Command Post (ICP) in Houma, Louisiana. At 5:00 pm the U.S. Coast Guard suspends its search for survivors. Survivors place the eleven missing workers near the scene of the explosion.
- April 24, 2010: A second Incident Command Post is established in Houston, Texas and a Joint Information Center (JIC) is established by the U.S. Coast Guard in Robert, Louisiana.

- April 25, 2010: British Petroleum activates a twenty-four hour telephone information hotline and establishes two claims offices to begin compensation efforts.
- April 26, 2010: A third Incident Command Post is added to the Unified Area Command, operating out of Mobile, Alabama. The Department of Energy begins to monitor British Petroleum's response efforts.
- April 27, 2010: Containment boom begins being laid along coastal areas of Florida and Louisiana.
- April 28, 2010: British Petroleum is named a Responsible Party (RP) for this spill by the U.S. Coast Guard and the National Pollution Funds Center (NPFC).
- April 29, 2010: Deepwater Horizon declared a Spill of National Significance (SONS) and a National Incident Command (NIC) is established. The Governor of Louisiana declares a State of Emergency.
- April 30, 2010: Governors of Alabama, Mississippi and Florida each declare a State of Emergency.
- May 1, 2010: Commandant Admiral Thad Allen of the U.S. Coast Guard is named National Incident Commander.
- May 6, 2010: The first oil traced to the Macondo well to reach land is found on the shores of the Chandeleur Islands off the Louisiana coast.
- May 6–8, 2010: Attempts to place a containment dome known as a coffer dam over the well are unsuccessful.
- May 11, 2010: The Louisiana National Guard applies to the U.S. Army Corps of Engineers for permission to build six sand berms to protect the Louisiana coast. Secretary Salazar of the Department of the Interior announces the restructuring of the Minerals Management Service (MMS) to create independent environmental oversight and safety entities.
- May 12, 2010: British Petroleum, determined to be the Responsible Party, releases 30 seconds of underwater video showing oil flowing from the ruptured Macondo well.

- May 15, 2010: Secretaries of the Department of Homeland Security and Department of Interior both sign a letter to British Petroleum's Chief Executive Officer notifying him that BP is responsible for the full clean-up of the Deepwater Horizon disaster and any economic loss caused by the spill.
- May 19, 2010: U.S. House of Representatives Energy and Environment subcommittee demands British Petroleum begin a publicly-available live-stream video broadcast of the undersea leaks.
- May 20, 2010: British Petroleum begins a 24-hour live-stream video of the leak that is accessible to the public over the internet.
- May 22, 2010: President Obama establishes the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling to make recommendations for the prevention and mitigation of future oil spills resulting from offshore drilling operations.
- May 24, 2010: The Department of Commerce declares a fisheries disaster and closes nineteen percent of the Gulf of Mexico to commercial and recreational fishing.
- May 25, 2010: The U.S. Army Corps of Engineers grants approval for a portion of the Louisiana National Guard's berm construction request.
- May 26, 2010: The Environmental Protection Agency orders a reduction in the use of chemical dispersants. British Petroleum also attempts a "top kill" process to stop the flow of oil from the ruptured well. After the third unsuccessful attempt, this strategy is abandoned.
- May 27, 2010: Flow rates from the Macondo well are estimated between 12,000 barrels and 19,000 barrels per day, up from initial estimates of 1,000 barrels per day.
- May 29, 2010: British Petroleum begins developing plans to install a "top hat" collection structure over the ruptured well to collect leaking oil.

- May 31, 2010: The fisheries closure boundary is extended, closing 61,854 square miles, or twenty-five percent of the Gulf of Mexico, to commercial and recreational fishing.
- June 1, 2010: The fisheries closure is extended to thirty-one percent of the Gulf of Mexico.
- June 3, 2010: The “top hat” is installed and begins collecting oil and siphoning it to a containment vessel at the surface.
- June 4, 2010: Oil from the Macondo well in the form of tar balls are discovered on Florida’s gulf coast beaches.
- June 16, 2010: A specialize oil response vessel, the Q4000, begins operations, processing and burning up to 10,000 barrels of oil per day.
- June 18, 2010: The Unified Area Command moves from Robert, Louisiana to New Orleans, Louisiana.
- June 28, 2010: Thirty-eight percent of the Gulf of Mexico is now closed to commercial and recreational fishing.
- July 9, 2010: An Incident Command Post is established in Galveston, Texas.
- July 12, 2010: A capping stack is installed over the leaking well, the first step in permanently sealing the Macondo well site.
- July 15, 2010: The capping stack is closed, stopping the flow of oil into the Gulf of Mexico.
- July 22, 2010: Tropical Storm Bonnie enters the Gulf of Mexico, temporarily suspending response operations. Portions of the fisheries closure begin to reopen.
- August 3, 2010: A static kill of the well is successful, permanently sealing the well with concrete.
- August, 2010: Throughout the month, relief wells are drilled to relieve pressure on the sealed opening of the Macondo well.
- September 7, 2010: Aerial inspection confirms all containment boom has been removed from the coasts of Alabama, Mississippi and Florida.

- September 19, 2010: The combination of the static kill and the effectiveness of the relief wells lead the National Incident Commander to determine the well is effectively sealed.
- September 20, 2010: The three Incident Command Posts are consolidated under the Gulf Coast Incident Management Team operating out of New Orleans, Louisiana.
- October 1, 2010: National Incident Command is terminated.
- December 1, 2010: The Unified Area Command transfers command of the incident to the Gulf Coast Incident Management Team in New Orleans.

D. SUMMARY

The data used for this comparative analysis comes from multiple Deepwater Horizon Oil Spill disaster sources, primarily government reports and after-action review documents. While this data is somewhat subjective, in that it was compiled and documented through individual observations of the disaster, it provides a consistent data set to which the two collaborative models can be applied.

The Deepwater Horizon Oil Spill disaster provides a case study of homeland security collaboration unequalled in the history of the United States in terms of the volume of response and coordination agencies, public sector and private sector engagement, length of response operations, and geographical impact.

By the end of 2010, more than 827,000 barrels of oil had been recovered, 47,000 responders were deployed, dozens of federal, state, local and tribal agencies were represented at locations throughout the Gulf of Mexico, dozens more private sector organizations were represented at the incident, 6,870 vessels, including barges, tugs, skimmers, and tankers, were utilized, 4,1200,000 feet of containment boom was placed to protect the coastline, 17,500 Louisiana National Guard troops were on orders for the response efforts, and eleven workers aboard the Deepwater Horizon lost their lives.

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IV. A COMPARATIVE ANALYSIS OF COLLABORATION AND DEEPWATER HORIZON

I always tried to turn every disaster into an opportunity.

–John D. Rockefeller

This disaster can be viewed through a variety of lenses, but for a story that is driven by collaboration and the problems agencies can have functioning within a collaborative environment, the lenses of improvisational theater principles and the Inter-organizational Collaborative Capacity model are the appropriate. It is important that I remind the reader of this narrative that one lens is not necessarily better, more useful, or more accurate through which collaboration can be viewed than the other. Rather, one lens is more widely accepted within the homeland security enterprise, and one lens is entirely unknown within the homeland security enterprise and, perhaps disruptive. However, the homeland security enterprise has benefited from innovation in the past, and continues to benefit from innovation. The analysis of the case study below, or rather, viewing the Deepwater Horizon tragedy through both lenses, provides examples of the Inter-agency Collaborative Capacity Model domains, as well as the Improvisational Theater Collaboration Model principles in the context of a real-world incident, demonstrating the utility of both models, and the collaborative innovation proposed in this thesis.

A. THE DEEPWATER HORIZON DISASTER AND THE INTER-ORGANIZATIONAL COLLABORATIVE CAPACITY MODEL

This section will examine specific observations from the Deepwater Horizon Oil Spill disaster, as documented in after action reviews and government reports. These observations will point to instances where a problem occurred, a decision was made within the collaborative domain to address that problem, and collaborative elements of the Inter-organizational Collaborative Capacity model were applied and the problem was successfully nullified through collaboration. Similarly, instances where a problem could have been more effectively addressed through a collaborative process had the elements of

the Inter-organizational Collaborative Capacity model were applied been applied in those situations.

1. Domain: Purpose and Strategy

The “Purpose and Strategy” domain refers to an organization’s ability to recognize its interdependence among other agencies and organizations, and its acknowledgement of the need to collaborate in order to achieve its goals and objectives.

a. Observation: Lack of Local Integration into Operations (Florida, 2011)

Although local jurisdictions are normally at the forefront of disaster response in Florida, this was not the case with the Deepwater Horizon Oil Spill disaster. Having a private-sector organization, in this case, British Petroleum, coordinating the response was uncharted territory for local jurisdictions in Florida. The flow of information from BP to impacted (or potentially impacted) local jurisdiction was determined to be insufficient and command and control decisions were not being made at the local level, as is typically the case for disasters more common to Florida like hurricanes (Florida, 2011, p. 30).

b. Analysis

The need to collaborate has been identified as a factor within the Purpose and Strategy domain by Hovecar et al. This domain is also marked by strategic collaboration and a willingness to address other agency’s interests or goals. Although local governments displayed a desire for integration into the operational planning for the Deepwater Horizon Oil Spill as the disaster began to impact Florida, BP did not demonstrate the same desire to collaborate or recognize the benefits of strategic collaboration with local governments in Florida to facilitate a more effective response. Although both BP and local governments in Florida were presumably working towards the common goal of protecting against environmental and economic impacts of the disaster, BP was not able to place the interests of Florida’s local governments (providing information to businesses and residents within their jurisdictions) ahead of, or even in

line with, its goals. Eventually, county governments in Florida were included in BP and the U.S. Coast Guard's operational decision-making process. Perhaps, if by focusing on the factors within the Purpose and Strategy domain and recognizing the need for strategic collaboration and sharing goals, resources, and ideas, local jurisdictions in Florida would have been brought into the decision-making process earlier in the incident response.

2. Domain: Structure

The "Structure" domain considers the presence of liaisons, interagency teams and task forces, or other formal structures to facilitate the collaborative process. This domain includes the need for flexibility within those structures, performance standards and established criteria to evaluate interagency collaboration, and the existence of goals, constraints, and authorities for individual collaborative efforts.

a. Observation: The Unified Command Mobile Provided a Command Structure That was too Large and too Complex (Florida, 2011)

Unified Command Mobile (AL) was established six days after the initial explosion at the Macondo well site, and followed the establishment of Incident Command Posts in Houston, Texas and Houma, Louisiana. UC Mobile was the command center for coordinating the response in Alabama, Mississippi and Florida. The volume of people, many of who were oil spill response contractors, led to competition among the three states for limited resources and difficulty maintaining command and control. The number of personnel working at UC Mobile also caused unnecessary redundancies, which led to breakdowns in messaging. UC Mobile became a revolving door for personnel from different jurisdictions, agencies and sectors, and this turnover greatly inhibited decision-making (Florida, 2011 p. 28).

b. Analysis

To address the problematic command and control issues associated with the enormous volume of personnel operating at UC Mobile, the Florida SERT found itself addressing this problem through the Structure domain of the Inter-organizational Collaborative Capacity model. The Structure domain calls for a formalized coordination

structure via committees, task forces, or liaisons and a formalized collaborative process. Dedicated assets and role clarity can also support the structural flexibility factor within this domain. Florida SERT embedded their forward team into established sections of the UC, which helped establish relationships and facilitating the use of liaisons between the UC and the Florida SEOC. Before the decision to embed the forward team into established sections, the forward team was relegated to tables outside of the operational work area, creating insulation around the forward team and creating barriers to communication. Clarifying the role of the Florida Forward SERT and including a representative from the forward team in the incident command structure and the forward team's engagement in the formal collaborative process (planning meetings, etc.) improved the level of cooperation for the Florida SERT at UC Mobile.

3. Domain: Lateral Processes

The “Lateral Process” domain is comprised of what Hocevar et al. refer to as “hard” and “soft” aspects of lateral coordination. The positive, interpersonal relationships that foster trust, open communication and information sharing lead to the development of social capital, a major component of this domain.

a. Observation: The Need for Real-time Document and Information Sharing (Florida, 2011)

A number of Florida State Emergency Response Team Members operated at various locations outside of the State Emergency Operations Center. This provided a challenge in real-time information and document sharing between personnel located in the SEOC and those operating in field locations or Unified Command Mobile. To address the need to share documents in real time, while providing some personnel read-only access and others editing/writing access as well, all on an interoperable platform, the Florida SERT utilized Google Docs, a free, open-source, off-the-shelf product to share and edit documents in real time from multiple locations (Florida, 2011 p. 16).

b. Analysis

The ability to exchange information and effectively communicate falls within the Lateral Mechanism domain of the Inter-organizational Collaborative Capacity model. This domain, which includes information sharing and collaborative learning as factors recognizes the technological needs, in addition to interpersonal networks, necessary to facilitate collaboration. The Florida SERT recognition of the need to develop, share, and edit incident-specific documents like ICS 213 forms requesting resources and leverage existing technology to address that need offers an example of facilitating collaboration within the Lateral Process domain of the Inter-organizational Collaborative Capacity model.

4. Domain: Reward Systems

The “Reward Systems” domain seeks out opportunities for financial, resource, or promotional incentives offered for collaboration, or the need for evidence of collaboration to receive grant funding.

a. Observation: Multiple Incident Action Plans Throughout the Unified Area Command (USCG-September, 2011)

Due to the time commitment required to complete an incident-wide Incident Action Plan, some supporting agencies began developing their own IAP to outline their goals, objectives and resource needs for their operations. This led to duplicative resource orders, and the purchase of resources that were already available to the incident’s operations. A single IAP was eventually agreed upon, due in part to funding requirements under the Pollution Removal Funding Authorizations (USCG-September, 2011, p. 16).

b. Analysis

The U.S. Coast Guard was finally able to consolidate the incident action planning of all entities involved in the Deepwater Horizon Oil Spill response, in large part due to the funding requirements under the Pollution Removal Funding Authorizations. The Incentive domain of the Inter-organizational Collaborative Capacity

model references incentives or rewards ties to collaboration. The mandate of a single IAP in order to procure resources through the Pollution Removal Funding Authorizations is an example of the creation of incentives to facilitate collaboration. While it may appear to punish noncollaborative behavior, it also rewards collaboration. By offering this funding incentive, agencies and organizations recognized a benefit that outweighed the drawbacks of a cumbersome process and began operating off of a single IAP.

5. Domain: People

The “People” domain refers to the collaborative ability of individual members of organizations. Conflict management skills, a willingness to share ideas and knowledge and understanding of how their organization operates in conjunction with respect for the expertise brought to bear by those in collaborative partner organizations are factors of this domain.

a. Observation: The Secretary of the U.S. Department of Homeland Security Serving as Principle Federal Officer (PFO) as Outlined in Homeland Security Presidential Directive-5 (HSPD-5) (USCG-January, 2011 p. 62)

The 2002 Homeland Security Presidential Directive 5 (HSPD-5) establishes the Secretary of Homeland Security as the Principle Federal Officer (PFO) for all natural or man-made disasters and emergency planning. Although most federal agencies understood the role of the DHS Secretary, in this case, Secretary Janet Napolitano as the PFO, the media and public seemed confused about who, from the federal government, was “in charge” (USCG-January, 2011, p. 62). The naming of a National Incident Commander and the inclusion of various agency heads in the command structure perhaps compounded this confusion. The amount of authority the Secretary exercises as the PFO is scalable to the scope of the event. In naming a National Incident Commander, the Secretary maintained overall responsibility for the incident but was able to maintain focus on operations throughout her department. The relationship between the PFO and the NIC was described in the Incident Specific Preparedness Review (ISPR) report as being “complementary and mutually supportive” (USCG-January, 2011, p. 64).

b. Analysis

The Inter-organizational Collaborative Capacity model describes the People domain as the collaborative capacity of the individual. This includes a respect for other parties' expertise, roles and perspectives. In the naming of a National Incident Commander, the Principle Federal Officer recognized not only her limitations in managing a disaster with the scope of the Deepwater Horizon Oil Spill, but her need to continue managing operations of the Department of Homeland Security. In naming U.S. Coast Guard Admiral Thad Allen as NIC, she clearly delineated the role of the PFO and the NIC, allowing the NIC to maintain strategic coordination of the incident and relied extensively on the expertise of Admiral Allen and the perspective he brought to managing this disaster.

B. THE DEEPWATER HORIZON DISASTER AND THE IMPROVISATIONAL THEATER COLLABORATION MODEL

This section will examine specific observations from the Deepwater Horizon Oil Spill disaster, as documented in after action reviews and government reports. These observations will point to instances where a problem occurred, a decision was made within the collaborative domain to address that problem, and the principles of improvisation, as described in the improvisational theater model were applied and the problem was successfully nullified through collaboration. Similarly, instances where a problem could have been more effectively addressed through a collaborative process had the principles of improvisational theater been applied in those situations.

1. Principle: Keep the Action Moving

The principle of "Keep the Action Moving" refers to the need move towards achieving the desired outcome, not becoming mired in minutiae or insignificant details, and focus on making decisions.

a. *Observation: Lack of State Integration at Unified Command Posts (USCG-September, 2011)*

The National Contingency Plan (NCP) makes provisions for state participation in oil spill or hazardous material release response command structures. Some states did not fulfill their role in the unified command structures in place for the Deepwater Horizon incident for one of two reasons: They did not provide representatives to participate in the unified command, or, state representatives were not authorized to make decisions on behalf of their state (USCG-September, 2011, p. 12).

b. *Analysis*

Although some states provided representatives to the unified command, if those representatives were not empowered to make decisions, they did not provide any value to the unified command. When an agency or state representative needs to reach back to his or her leadership for authorization on a course of action, that course of action comes to a stop until the decisionmaker can be reached, the information provided the representative can be relayed, digested by the decisionmaker, a decision made, and that decision conveyed to the representative who in turn must pass the decision on to the unified command—then the action of the unified command ceases to progress during the decision-making process.

2. Principle: Yes, and...

The “Yes, and...” principle refers to the need to acknowledge or accept offers as opposed to saying “No,” which can limit innovation and creativity sometimes needed to address complex problems or issues in the collaborative environment.

a. *Observation: Increasing Response Times to Reports of Oil (USCG-September, 2011)*

As reports of oil in the water and along the Gulf coastline became more frequent, the NIC determined the U.S. Coast Guard needed to decrease their response times to these reports. The USCG Search and Rescue standards were applied to oil reports and included mandatory launch of assets within 30 minutes of the report and

arriving on-scene within two hours. The teams tasked with search and rescue for the USCG, the Marine Safety and Security Teams (MSST) typically do not respond to oil spills. Therefore, qualified Coast Guard oil spill responders with prior training and experience with assessing oil spills accompanied the MSST on these missions. This rapid evaluation of new spills assisted the Incident Command Posts around the Gulf to prioritize their response efforts, and based upon the threat posed by new oil concentrations, determine which resources should respond (USCG-September, 2011, p. 59).

b. Analysis

Although the specific conversations leading to the decision to utilize MSST for oil spill assessment are not documented, the principle of Yes, and... could have been used for this decision. When faced with a problem (“We need to assess oil reports more quickly”) the decision makers accepted that this was true and said “Yes, and can the USCG Search and Rescue standards be useful somehow?” If the other decision makers had said “No,” the use of the MSST and their stringent response time-frames may not have emerged as a useful solution. Instead, the decision makers said “Yes, and can we ensure our MSST are accurately assessing the amount of oil they are observing?” Again, a “No” would have killed this innovation. But an answer of “Yes, and we can place trained oil response specialists on our MSST vessels to do the assessment” allowed this novel use of MSST resources to solve a problem and positively impact response efforts.

3. Principle: Allow What is Presented to Change You

The principle of “Allow What is Presented to Change You” creates a mechanism to mitigate “tunnel vision” and preconceived notions about what the reality should be and instead, recognizing what actually is the reality.

a. Observation: The Emergence of the Interagency Solutions Group (IASG) (USCG-September, 2011)

A National Response Team (NRT) was organized in accordance with the National Response System (USCG-September, 2011, p. 4) and is comprised of 15 federal

agencies. They are responsible for “developing, deconflicting and reconciling intergovernmental policy issues that surface during an oil spill response” (USCG-September, 2011, p. 8). NRTs can be activated as an emergency response team when a spill involves a severe threat to public health and welfare, with the primary action being serving as counsel and providing recommendations to the National Incident Commander (NIC). One problem facing the NRT was the level of coordination needed for this incident was primarily at the Department level, which is a higher level than what was called for in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)⁵ (USCG-September, 2011, p. 4). The ad hoc IASG assumed the doctrinal duties of the NRT, became a self-contained interagency body with decision-making authority, and proved adept in promoting interagency unity of effort. The IASG relied on representatives from 20 federal agencies and departments, and the FOSC report determined that nearly all of the recommendations to come from the IASG were the result of group consensus. The IASG itself remained adaptive and flexible in their response, dividing itself into seven specialty teams to better focus their efforts on challenges as they emerged (USCG-September, 2011, p. 9).

b. Analysis

Although a framework existed to bring federal stakeholders together to make decisions and guide policy during a large oil spill or hazardous material leak, the NIC determined the scope of the Deepwater Horizon disaster, which necessitated a different multi-agency coordinating group structure. The NIC initially began managing the incident in coordination with the NRT, the NIC allowed these observations, or what was presented, to change its course of action and establish the IASG.

4. Principle: Make Your Fellow Players Look Brilliant

The “Make Your Fellow Players Look Brilliant” involves setting up partners, whether agencies or individuals, for success, rather than failure. Providing the proper

⁵ The NCP is the federal government’s blueprint for responding to oil spills and hazardous substance releases, and establishes the National Response System.

equipment and information to collaborative partners will facilitate the execution of this principle.

a. Observation: Disorganized Messaging Costs Credibility with the Public (USCG-January, 2011 p. 65)

During the Deepwater Horizon response, the U.S. Department of Homeland Security established a centralized crisis communication construct based upon the National Response Framework, a more centralized, “top-down” public affairs model that countered the public affairs doctrine outlined in the NCP (USCG-January, 2011, p. 71). This external affairs structure created additional message review and approval layers that hindered the USCG’s ability to meet the requirements of the NCP for informing stakeholders of the incident response status. This shift from the NRT Joint Information Center model to the NRF Joint Information Center Model also excluded the responsible party, British Petroleum, from many public information dissemination opportunities leading to a Joint Information Center where message development was not coordinated (USCG-January, 2011, p. 67). This lack a comprehensive and inclusive crisis communication plan negatively impacted timely and accurate messaging, leading in some instances to a loss of credibility with the public (USCG-January, 2011, p. 68).

b. Analysis

On the surface, the principle of making your fellow players look brilliant may appear to advocate for glossing over errors or mistakes. In improvisation, there really are no mistakes, so instead, this principle should encourage setting up fellow players for success, not failure. In this instance, a lack of timely and accurate information sharing from the response organization to the public created a loss of trust between the public and the response agencies, creating an organization where those responsible for disseminating information were set up to fail. Establishing coordinated, unified messaging protocols for this incident would have mitigated the public distrust of organizations that were providing conflicting, outdated or inaccurate information to the public. Had the principle of “Make your fellow players look brilliant” been applied to this situation, all agencies and organizations, including British Petroleum, would have been

included in the information dissemination process via the Joint Information Center, setting them up to succeed, as opposed to fail.

5. Principle: Serve the Good of the Whole

The principle “Serve the Good of the Whole” references the need to place the goals of the entire collaborative environment ahead of the individual goals and objectives of any one entity within the collaboration.

a. Observation: Competing Incident Action Plans (IAP) (USCG-September, 2011)

Several supporting agencies found the IAP tactics development meetings too time consuming and began developing their own IAPs. The existence of multiple IAPs for the same operation resulted in instances where efforts were duplicated and resources were purchased or contracted even though those resources were in many cases already available and on-scene (USCG-September, 2011, p. 16).

b. Analysis

The principle of “Serve the Good of the Whole” is the ultimate goal of multi-agency coordination. In this instance, agencies that developed their own IAPs in order to avoid participating in what they perceived as a cumbersome process served only their interests and their mission. This self-serving approach by individual agencies and organizations operating as part of the Unified Area Command may have even been more detrimental to their interests, as the duplication of effort and ordering of resources already available may have been a waste of those agency’s financial resources and moved resources from an operation unaffiliated with the Deepwater Horizon Oil Spill. A coordinated response, driven by a single IAP, provides the best opportunity of an efficient use of resources and to reduce the duplication of efforts. The application of the “Serve the Good of the Whole” principle in this instance, as opposed to an organizational free-lance approach to establishing incident objectives through individual IAPs, would have better served the incident response.

C. A COMPARISON OF MODELS

1. How Does the Inter-organizational Collaborative Capacity Model View Collaboration?

The Inter-organizational Collaborative Capacity Model is predicated on the notion that the collaborative capacity of an organization hinges upon the organization's leadership's attention to collaboration and the design elements of an organization must foster a collaborative environment (Hocevar et al., 2011). This model is also focused primary on the development of the model to identify and assess the capacity of agencies and organizations to collaborate before the crisis (Hocevar et al., 2011). In this way, the Inter-organizational Collaborative Capacity Model can serve as an evaluative framework for organizational collaborative capacity.

Hocevar et al. have also referenced research by Amy Donahue and Robert Tuohy, which proposes three recommendations for strengthening the learning process to change disaster planning and processing practices. One of the three recommendations cited by Hocevar et al. is the need to establish incentives to "institutionalize lessons-learning processes at all levels of government" (Donahue & Tuohy, 2006). Perhaps the model proposed by Hocevar et al. could be considered a path forward to institutionalizing collaboration among homeland security organizations and agencies. The five domains outlined in the Inter-organizational Collaborative Capacity Model could be established as assessable criteria or evaluation metrics for agencies and organizations to determine their collaborative capacity. The existence of these domains was demonstratively evident in the Deepwater Horizon Oil Spill disaster case study, lending further support to their utility in the collaborative process.

Hocevar et al. have also suggested in their 2006 research that organizations can assess their capacity to work with a generic "other" organization (Hocevar et al., 2006). Although not reflected in the questions for their 2006 study, Hocevar et al. found that organizations, like individuals, may not be compatible with each other (p. 32).

The criticality of inter-organizational collaborative capacity in homeland security for both the conduct of routine task and improvising and innovatively responding to

disasters is inescapable, according to Hocevar et al., 2006. Although collaboration may not be equally as important in every situation, its importance increases as inter-agency decision making and task interdependencies increase. Hocevar et al. have focused their research, and the Inter-organizational Collaborative Capacity Model, on identifying the capacity of organizations in the predisaster preparedness phase, and not waiting until the need to collaborate is thrust upon an organization during an emergency or disaster (Hocevar et al., 2006).

2. How Does the Improvisational Theater Collaboration Model View Collaboration?

Improvisation, as used in this research and as a theatrical performance and rehearsal style, was originally developed to train individuals with little to no theater performance background to be able to perform scripted work on stage. Just as Viola Spolin, and later Paul Sills, believed everyone can improvise, the Improvisational Theater Collaboration Model suggests anyone, any agency, and any organization can be taught the five principles associated with the model and “learn” how to collaborate. Although each of the principles of the Improvisational Theater Collaboration Model emerged organically during the Deepwater Horizon Disaster, formalizing the model and institutionalizing the principles may lead to increased instances of the principles facilitating the collaborative process.

The Improvisational Theater Collaboration Model accounts for the evolving, dynamic, unscripted environment in which homeland security agencies, organizations, and individuals that works within those entities function, and suggests an institutionalized approach to developing the capacity to collaborate, while beneficial, is not imperative. As demonstrated in the Deepwater Horizon Oil Spill disaster case study, a disaster can bring agencies, organizations and individuals together with no-notice and require collaborative decision making to achieve the objectives of an incident. The improvisational theater model is predicated on the idea that individuals or organizations with limited knowledge of the other or experience working together can adhere to the model’s principles and collaborate effectively.

The Improvisational Theater Collaboration Model can be a tool for evaluating the efficacy of a collaborative endeavor but is designed to guide the “how to” of collaboration. The principles of the model would be difficult to assess before they were pulled from the proverbial toolbox and placed into service during a disaster that called for collaboration among agencies and organizations. An organization may not say “Yes, and...” or practice the four other principles described in the model during day-to-day intra-organizational operations, but it may fully integrate the five principles when called upon to collaborate inter-organizationally during disasters or nonemergent planning or strategic initiatives.

3. Examining the Differences

As stated numerous times throughout this paper, the determination of a better model or framework for homeland security collaboration is not the intended outcome. The Improvisational Theater Collaboration Model has been shown to be useful in the homeland security collaborative context, and the utility of the Inter-organizational Collaborative Capacity Model has been demonstrated as well. There are, however, subtle differences that may make one model more appropriate depending upon the desired result.

The Inter-organizational Collaborative Capacity Model does not necessarily facilitate collaboration or provide a method of collaborating, but it does identify what should be present for collaboration to occur. The Improvisational Theater Collaboration Model does lay out action-oriented principles that can guide an agency or organization towards “doing” collaboration, but it is not as useful as the Inter-organizational Collaborative Capacity Model in identifying or assessing an organization’s capacity to collaborate.

The Inter-organizational Collaborative Capacity Model lays a foundation for an organization in advance of the need to collaborate in an effort to institutionalize the collaborative process and develop an organization’s capacity to collaborate. The Improvisational Theater Collaboration Model is designed to facilitate collaboration on the

fly, absent the domains described in the Inter-organizational Collaborative Capacity Model.

In improvisational theater, most anyone who adheres to the commonly accepted principles can improvise provided the fellow players are adhering to the principles as well. The Improvisational Theater Collaboration Model also supposes that any organization or individual following the five principles of the model can be a successful collaborator, providing the other organizations or individuals in the collaborative space are following the principles as well. The Inter-organizational Collaborative Capacity Model says organizations may not be compatible with each other, hindering their ability to collaborate, even when each of the domains of the model are present within an organization.

Each model recognizes the importance of collaboration to the homeland security enterprise, and examples of the implementation of each model are evident in homeland security collaboration initiatives, or at least in the Deepwater Horizon Oil Spill disaster case study. The Inter-organizational Collaborative Capacity Model appears to be geared more towards developing and evaluating an organization's ability to collaborate, while the Improvisational Theater Collaboration Model is designed as a tool to teach organization's how to collaborate or facilitate the collaborative process in a dynamic disaster environment.

D. SUMMARY

Without making the claim that one approach to collaboration was better than another, both models were applied to a single case study to demonstrate their applicability to homeland security and inter-agency collaboration. Chapter I asked "Is there evidence of the principles of improvisation having been successfully applied to the collaborative space within which the homeland security enterprise so often operates?" Through an analysis of a single case study, the Deepwater Horizon, examples were found of each of the five principles having been applied to the collaborative efforts during the response to that disaster. Examples of the five Inter-organizational Collaborative Capacity Model domains were also found, lending validity to that model's applicability

in the homeland security collaborative environment. Chapter I also indicated the applicability of the principles of improvisational theater would be revealed through the research and its utility demonstrated. The Deepwater Horizon case study revealed multiple instances improvisational theater principles, as they applied to that collaborative environment and cited examples of their utility in practice, and where they could have been utilized to possibly improve outcomes.

The two models approach collaboration from two different perspectives. The Inter-organizational Collaborative Capacity Model focuses primarily on the domains and factors necessary for collaboration to occur between organizations, whereas the Improvisational Theater Collaboration Model provides action-oriented principles that can be implemented by an organization or agency to facilitate the collaborative process. The Inter-organizational Collaborative Capacity Model also suggests the foundation for successful collaboration should be laid during the preparedness phase, before a disaster occurs and agencies must collaborate during a crisis. The Improvisational Theater Collaboration Model, while applicable to nonemergency situations, provides a framework for agencies and organizations to collaborate during a disaster or dynamic emergency situation, even when the domains identified in the Inter-organizational Collaborative Capacity Model are not present.

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V. SYNTHESIS OF COLLABORATION, IMPROVISATIONAL THEATER, AND HOMELAND SECURITY

Sometimes it works, sometimes it fails, but that's what we face when we're dealing with improvisation.

–Jan Garbarek

The analysis in the preceding chapter demonstrates that collaboration sometimes occurs, and sometimes it does not occur. Sometimes collaborative efforts are successful and fulfill the predetermined objectives, and sometimes those efforts are not successful and the objectives are not met. Those instances of collaboration, or noncollaboration, were then evaluated using two collaborative models. This thesis sought to answer whether or not the principles of improvisation can be applied to the homeland security collaborative environment. The research of the Deepwater Horizon case study and analysis through the Improvisational Theater Collaboration Model indicated it can. This chapter will explore how the improvisational theater collaboration model could be applied, what that model would look like, and how that model would frame the collaborative space in homeland security.

A. AN IMPROVISATIONAL THEATER-BASED MODEL FOR COLLABORATION

The homeland security environment relies heavily on collaboration. Evidence of collaboration, and a need to improve collaboration, has been documented in this thesis through the examination and analysis of the Deepwater Horizon case study. The success of a collaborative effort relies on ability of each agency or organization involved to function within the collaborative space. Since the “how” of collaboration has not yet been integrated into policy, guidance documents, training curriculum, or the exercise evaluation process, perhaps a model, or framework that describes the components of collaboration, will benefit the collaborative process.

Just as the common structure of the Incident Command System and the National Incident Management System-mandated shift away from coded language to plain text for

multi-agency/multi-jurisdiction responses were designed and implemented with the goal of improving the ability for agencies to work better in the field (DHS, 2008), a common model for collaboration may also work to improve agencies and organizations abilities to collaborate in the homeland security environment.

B. A VISUALIZATION OF THE MODEL

The homeland security enterprise is also accustomed to operating in structures, organizational charts, hierarchies, continuums and cycles.⁶ The improvisational collaborative model, as I have envisioned; however, is not hierarchical as no one principle outweighs the importance of another. Nor is this model a continuum or cycle, where one principle feeds into another principle. The Improvisational Theater Collaboration Model, as I have envisioned it, requires the application of each principle to fully illuminate the collaborative space. If one agency is “serving the good of the whole” and ensuring the needs of their agency are not placed above the needs of another agency, but is not saying “yes, and...” to the ideas of others, then the collaboration may not be as effective as if all of the principles were being applied.

I have drawn a comparison of agencies and organizations to players in an improvised theater performance. If agencies and organizations are the players, than the collaborative space is the stage (since collaboration does not necessarily occur in a physical space like an incident command post, emergency operations center, or executive conference room, I tended to not think of collaboration as occurring in a specific place). The image of footlights and spotlights immediately came to me, and the notion of each of the five principles of improvisation serving to illuminate that space led to the development of the illustrated improvisational theater collaboration model on the following page. Theatrical lighting, like the application of the five improvisational theater principles, must also be balanced. Lighting technicians balance cool-colored lights like blues and violets with warm-colored lights like yellows and ambers to create or enhance

⁶ The Incident Command System Command and General Staff organizational charts, National Response Framework’s Emergency Support Functions, the Preparedness and Intelligence Cycles, and the SAFECOM Interoperable Communications Continuum are all examples of widely-used structures within the homeland security enterprise.

shadow and light. Similarly, the principles of improvisation should be evenly balanced in the collaborative space, and all five should be present. As no agency or organization is to outshine another in the collaborative, space, each principle puts forth the same amount of light onto the stage. As agencies within the collaborative domain must work to serve the good of the whole, each principle must illuminate the entire space, not just a specific area.

IMPROVISATIONAL THEATER COLLABORATION MODEL

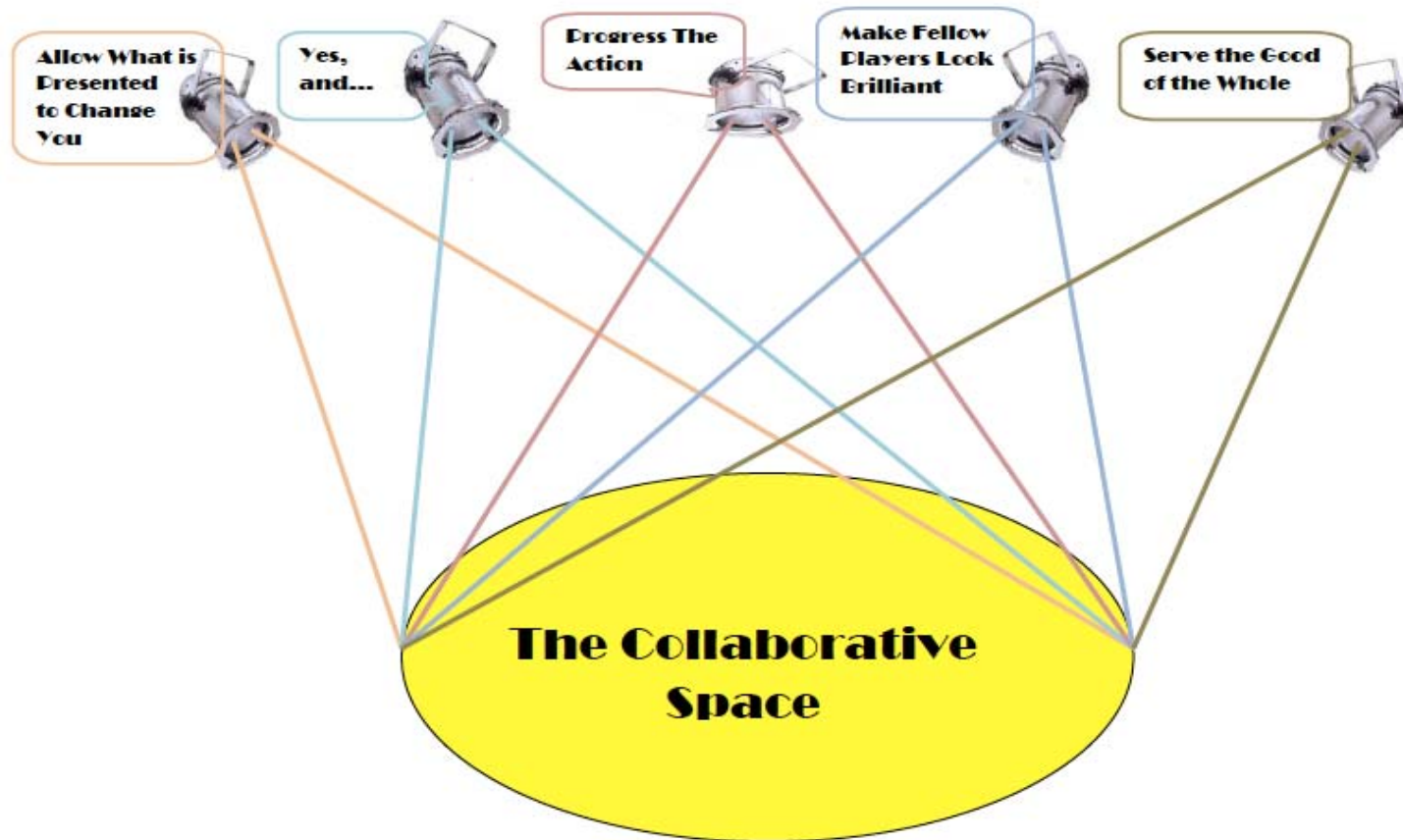


Figure 3. A Visualization of the Improvisational Theater Collaboration Model

C. SUMMARY

The Improvisational Theater Collaboration Model provides a common structure for inter-agency collaboration. Much like a structured format for incident command (the Incident Command System), this model provides a structured format for collaboration. The visualization of the model demonstrates the importance of each of the five principles contained within the model, and that each of the five principles is needed to “illuminate” the collaborative space. The model is intentionally designed to *not* place importance of one principle over another, and that each principle casts the same amount of light on the collaborative space.

The title of this paper begins with the phrase “Play Well With Others.” That is a phrase borrowed from my time studying theater and improvisation at the New Actors Workshop in New York City, and a variation on a phrase used as an evaluation metric on my preschool report card, “Plays Well With Others.” The phrase did not mean the student was everyone’s best friend, never argued, avoided conflict, or was necessarily a follower or leader. It meant that the student knew how to function in a group without making the others cry (this was as true for preschool as it was for acting school). It meant that the student generally adhered to social norms and was polite, could manage conflict, argue a position without personal attacks or taking attacks personally, and knew when to lead and when to let others take the lead. This model for collaboration, and the visualization of that model, seeks to highlight those traits of playing well with others. Sharing the spotlight, seeing everything that has been lit on the stage, and crafting a narrative with (not for or instead of) your fellow players is the goal of this framework and the development of a collaborative space for homeland security.

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VI. FINDINGS AND RECOMMENDATIONS

Theater Games are a process applicable to any field, discipline, or subject matter which creates a place where full participation, communication, transformation can take place.

–Viola Spolin

A. FINDINGS

This researched narrative is the first literary contribution that applies improvisational theater to the collaboration and multi-agency coordination process. This narrative has identified commonalities between the collaborative space and improvised theater performance and has proposed a model for enhancing the capacity for collaboration among agencies and organizations in the homeland security enterprise.

The reader of this narrative can begin identifying opportunities within his or her own agency or organization's collaborative efforts to implement the collaborative model based upon the principles of improvisational theater to those efforts. It is important that the reader understands the inherent flexibility of the improvisational theater guidelines and uses his or her intuition, creativity and innovative capacity to determine how best to apply these principles to facilitate the sharing of risk throughout a collaborative process.

This narrative offers the most significance to homeland security leaders and practitioners, if they are willing to adhere to the improvisational theater principles outlined within this narrative and while reading the analysis, especially principle of “Yes, and....” Ideally, the reader must be able to think, while reading this narrative, “Improvisation can be applied to multi-agency coordination and collaborative decision making. Yes, and...”

Early on in this narrative, a question was asked: Can improvisational theater principles be applied to homeland security collaborative environment? Through the examination of the Deepwater Horizon Oil Spill disaster, examples were provided where either one of the five principles of improvisational theater was applied to the

collaborative problem space and a solution was found. Or, if one of the five principles had been applied, then perhaps a problem could have been solved or avoided. While Deepwater Horizon is but one case study, the complexity of that disaster and the applicability of improvisational theater principles to multiple instances of collaboration within that case study provides a compelling answer to that question: Yes, they can. These improvisational theater principles, or the model proposed based upon these principles, is not the only approach to collaboration within the homeland security environment. Certainly the Inter-organizational Collaborative Capacity model is applicable to that environment. The analysis presented in this narrative indicates, however, that the Improvisational Theater Collaboration Model is applicable as well.

This narrative also put forth several hypotheses. Agencies and organizations within the homeland security enterprise can be better collaborative partners. Homeland security is open to innovation and creativity. Homeland security, like most things, has evolved through innovation and creativity. That innovation, however, has not yet extended into multi-agency collaboration. The principles of improvisational theater may improve the ability of agencies and organizations that make up the homeland security enterprise to work in a collaborative space. Homeland Security is, in many ways, improvised everyday. Perhaps the most important hypotheses, built on top of the hypotheses above, is this: If each agency, organization, jurisdiction, or private company working within the homeland security enterprise can view itself and its counterparts as performers in an improvised play and accept that each performer must rely on each other, allow themselves to be relied upon, share successes and failures without becoming mired in finger-pointing and focus instead on moving toward the desired outcome, then improvisational theater and its guiding principles will have increased their capacity to collaborate and served the collaborative process that is so important to homeland security.

Each of these hypotheses was supported through the research and analysis that comprises this narrative. Examples from Deepwater Horizon were provided indicating agencies and organizations do not always collaborate as well as they could, and could be better collaborative partners. Instances of innovation within the homeland security

enterprise like the integration of new technologies described in Chapter I abound, and by the Naval Postgraduate School's Center for Homeland Defense and Security's support and publishing of this narrative shows some degree of openness for creativity. Examples of truly innovative approaches to collaboration are elusive, and through the course of research for this narrative, no examples of innovative approaches to collaboration could be found, supporting the hypothesis that innovation has left the development of the collaborative space largely untouched. The unscripted nature of homeland security was revealed in the timeline of the Deepwater Horizon Oil Spill disaster that could not have been written until it had occurred, and improvisational theater principles were unknowingly often applied to collaborations during the response to that disaster.

The affirmation of the final, and what I described as most important, hypothesis is less clear. The validity of that hypothesis perhaps cannot be known until the application of the guiding principles for the improvised theater performer is consciously integrated into the collaborative homeland security space. However, based upon the evidence offered in support of the other hypotheses, it is my belief that agencies and organizations within the homeland security enterprise can find collaborative capacity through the use of the principles of improvisational theater.

B. CONCLUSIONS

In an academic environment, I have had the opportunity to put a voice to some grand ideas, verbose thoughts and deep musings about homeland security, emergency management, constitutional law, privacy, the intelligence community, and now, improvisational theater and its applicability to homeland security. In my mind, however, is the voice of a professor asking "So what?" Here is what I have distilled into the so what.

The principles that guide improvised theater are applicable to collaboration and the homeland security environment. These principles, while not necessarily providing step-by-step instructions for working in a collaborative environment under every circumstance, do provide a "how" of "how to collaborate." These principles have been effectively taught to grade school-aged children for decades, surely homeland security

practitioners can learn them. Training curriculum for improvisational theater already exists. Methods of observing whether or not the principles are being applied during a performance or rehearsal already exist. Most of the work has been done with regards to the development of the framework. That work was not done during the writing of this thesis, but more than seventy years ago in a classroom in Chicago. Most of these principles are already being used in the collaborative space within the homeland security environment; we just do not know we are using these principles. In the writing of this thesis, I have had the opportunity to point out what has worked in the theatrical domain, and how it already appears to be working in homeland security. The secret is out. There is a “how to do collaboration.”

C. RECOMMENDATIONS FOR NEXT STEPS AND FUTURE STUDY

This narrative applied two models for collaboration to an incident requiring unprecedented coordination across all levels of government and sectors. The goal of that comparison was not to emerge with a superior collaborative model, but rather, an alternate model to facilitate the collaborative process and to validate that model through analysis. It is recommended that this model be included with others, like the Inter-organizational Collaborative Capacity model, in future discussions, research and evaluations of homeland security collaborative efforts.

As the initial effort to apply improvisational theater to multi-agency collaboration, much will be left to future research efforts, especially for the continued integration of improvisational theater principles into the collaboration process. Identifying performance metrics, inclusion of those metrics into exercise evaluation criteria, and the development of an instructional curriculum for the introduction of these principles may be next steps.

1. Improvisation Model for Training Would-Be Collaborators

The Federal Emergency Management Agency’s Emergency Management Institute is full of training courses, delivered both in a classroom setting and through the distance learning environment, aimed at preparing homeland security professionals to do their jobs. Courses in Incident Command, planning, even tsunami preparedness are all offered. There are, however, no courses teaching homeland security professionals how to

collaborate. There are courses that teach effective communication, leadership, problem solving, and even a course about multi-agency coordination, all components of collaboration, but not a single course that says, “This is how you collaborate in the homeland security environment.

Improvisation, however, is something that is taught across the country, to kids and in retirement communities, corporate executives and college thespians. Taking the five principles of improvisation that have been synthesized into a model for collaboration, and turning that model into the basis of a training course designed to teach collaboration to homeland security practitioners is a possible next step in the research, development and refinement of this improvisation-based model for collaboration.

Once these principles have been integrated into the homeland security vernacular through a training program, additional opportunities to integrate these principles into planning and exercise initiatives may be revealed.

2. Improvisation Model to Evaluate Collaborative Efforts

Collaboration in the homeland security environment is difficult to assess. This thesis puts forth several examples in the Deepwater Horizon Oil Spill disaster where collaboration either occurred and adhered to one of two models of inter-agency collaboration, or did not occur but the use of one of the models may have helped facilitate the collaborative process.

A 2013 GAO report addressing the coordination challenges of information sharing recommended “Individual accountability for collaborative efforts can be reinforced through performance management systems by identifying competencies related to collaboration and setting performance expectations for collaboration. Incorporating performance metrics that emphasize collaboration and coordination with partners can benefit multiagency efforts.” (GAO, 2013, p. 35). This recommendation could serve as the starting point for additional study into the application of the improvisational framework to incidents, perhaps as part of the after-action review process, to evaluate the level to which collaboration was occurring during the incident. Did agency representatives allow what was presented through the course of the incident

to alter their approach, or did they move forward, ballistically, never wavering from their initial trajectory. Was one organization sabotaging the performance of another agency or organization? Did one agency appear isolated from the decision-making process or seem to be serving its goals and not the common goals of the incident? Those questions may be further refined into performance metrics to evaluate, post-incident, whether or not collaboration was occurring. The same metrics may also prove valuable during an incident or through the preincident planning process (during the drafting of All-Hazard Emergency Operations Plans, Hazard Mitigation Plans, or other planning efforts hinging upon a collaborative process) to assess the collaborative space or trouble-shoot instances where the collaborative process is not getting off of the ground.

D. SUMMARY

The analysis of the Deepwater Horizon case study demonstrated the applicability of improvisational theater principles to collaboration in the homeland security environment. This supported the hypotheses about collaboration and improvisation, and provided the basis for the creation of the Improvisational Theater Collaboration Model.

This model for collaboration suggests a “how” for collaboration. The principles are supported through a variety of improvisational theater games that have been used as teaching tools for decades, and as discovered through the analysis of Deepwater Horizon, some of these principles are already in use, although not in the framework as presented in this thesis.

This paper is the initial effort to contribute the principles of improvisational theater to the homeland security collaborative environment. As such, there is much work to be done to integrate these principles into homeland security operations as a collaborative structure. Future steps for the progression of this model may include the development of an improvisational-based training curriculum for homeland security practitioners to hone their collaborative skills and enhance their capacity to collaborate. Improvisation is already being taught to children, performers, and business executives across the country, so the manipulation of improvisational theater games to suit homeland security practitioners is a realistic objective. These same principles can also be used to

develop performance metrics to evaluate interagency collaboration, both during emergencies or disasters or nonemergent preparedness and prevention initiatives like plan development or the conduct of exercises. As an evaluative tool, this model can also be used during an emergency or disaster to diagnose barriers to the collaborative process and offer solutions to increase the efficacy of inter-agency collaboration.

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